

Honeywell HSVR-16
Digital Video Recorder
User Manual

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Welcome

Thank you for purchasing our DVR!

Please refer to this user's manual for the installation and operation of HSVR-16.

Here you can find information about this series DVR features and functions, as well as a detailed menu tree.

Before installation and operation please read the following safeguards and warnings carefully!

Important Safeguards and Warnings

1. Electrical safety

All installation and operation here should conform to your local electrical safety codes.

We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

2. Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3. Installation

Keep upwards. Handle with care.

Do not apply power to the DVR before completing installation.

Do not place objects on the DVR.

4. Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.

We are not liable for any problems caused by unauthorized modifications or attempted repair.

5. Environment

The DVR should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

6. Accessories

Be sure to use all the accessories recommended by manufacturer.

Before installation, please open the package and check all the components are included.

- Software CD
- USB mouse
- Network cable
- 12VDC power adapter
- Power cord
- SATA data cable and screws for HDD installation
- User manual
- Remote controller
- 16 BNC connectors
- 1.5 meter HDMI cable

Contact your local retailer ASAP if something is broken in your package.

1 Features and Specifications

Overview

HSVR-16 is an excellent digital video surveillance product. It adopts embedded Linux OS to maintain reliable operation. Popular H.264 compression algorithm and G.711 audio compression technology realize high quality, low bit stream. Unique frame by frame play function is suitable for detail analysis. It has various functions such as record, playback, monitor at the same time and can guarantee audio video synchronization. This series product has advanced technology and strong network data transmission function.

This series device adopts embedded design to achieve high security and reliability. It can work standalone with local Graphic User Interface, and can also be accessed by IE web client through Ethernet for remote surveillance.

This series product can be widely used in various areas such as intelligent resident zone, banking, telecommunication, electric power, interrogation, transportation, factory, warehouse, resources, and water conservancy.

Features

This series product has the following features:

- Real-time monitoring

It has analog (CVBS), VGA and HDMI output port for real-time surveillance by a monitor or TV set.

The system supports the three outputs at the same time.

- Storage function

Special data format guarantees data security and avoids vicious data modification.

- A/V compression

Support multi-channel audio and video. Independent hardware codecs encodes and decodes the audio and video signal from each channel to maintain video and audio synchronization.

- Backup function

Local backup via USB port for flash disks and portable HDDs

IE web client can download the file to local HDD to backup via network.

- Recording and playback function

Support simultaneous real-time recording, record search, forward/backward playback, network monitoring, record download in all channels.

Support various playback modes: slow, fast, backward and frame by frame playback.

Support time title overlay for accurate event occurrence time display

Support zoom of specified zone in the picture.

- Network operation

Support remote real-time monitoring, remote record search and remote PTZ control via network.

- Alarm interlock function

Three relay alarm outputs to realize alarm interlock and on-site light control.

- Communication port

RS485 port for PTZ control.

RS232 port for system upgrade and maintenance with PC COM connection, and matrix control.

Standard Ethernet port for network access function.

- PTZ control

Support PTZ decoder via RS-485 communication.

Support Pelco-D protocol to allow the PTZ to control the speed dome.

- Intelligent operation

Support USB Mouse operation function

In the menu, support copy and paste for settings.

Specification

	Parameter	HSVR-16
System	Main Processor	High-performance industrial embedded micro controller
	OS	Embedded LINUX
	System Resources	Multiplex operations: simultaneous 16-channel recording, 16-channel playback and network operation
	Interface	User-friendly graphical user interface
	Input Devices	Front panel, USB mouse, remote control
	Input Method	Numbers, letters, symbols and extensible Chinese
	Shortcut Function	Copy/paste operation, USB mouse right-key shortcut menu, double click USB mouse to switch screen.
Compression Standard	Video Compression	H.264
	Audio Compression	G.711A
Video monitor	Video Input	16-CH composite video input: (NTSC/PAL) BNC (1.0V _{P-P} , 75Ω)
	Video Output	1-ch PAL/NTSC BNC (1.0VP- P, 75Ω) composite video signal output 1-ch VGA output; 1-ch HDMI output Support TV/VGA/HDMI video output at the same time.
	Video Standard	PAL (625 line, 50f/s), NTSC (525 line, 60f/s)
	Record Speed	PAL 1f/s to 25f/s per channel and NTSC 1f/s to 30f/s per channel
	Video Partition	1/16 windows
	Monitor Touring	Support monitor touring modes: alarm triggered, motion detection triggered, and manual control.

	Resolution (PAL/NTSC)	PAL/NTSC Real-time monitor: D1 704×576/704×480 Playback: Channel1: D1 704×576/704×480, CIF 352×288/ 352×240, QCIF 176×144/176×120 Channel9 : D1 704×576/704×480, CIF 352×288/ 352×240, QCIF 176×144/176×120 Other channels: CIF 352×288/ 352×240, QCIF 176×144/176×120 Support dual streams: extra stream resolution QCIF 176×144/176×120
	Motion Detection	Zone setup: support max 396(22×18) zones. Support various sensitivity levels.
	Image Quality	6-level image quality adjustable
	Privacy mask	Support max 4 user defined zones of privacy mask in each display window.
	OSD in record	Channel information, time information and privacy mask zone.
	TV Adjust	Adjust TV (CVBS) output zone for monitors of display distortion.
	Channel Lock	Cover secret channel with blue screen though system is encoding normally. Screen -lock function to prevent unauthorized user seeing secret video
	Live Channel Status OSD	Channel name, recording status, screen lock status, video loss status and motion detection status are shown on the bottom left of display screen.
	Color Configuration	Hue, brightness, contrast, saturation and gain setup for each channel
Audio	Audio Input	4-ch 200-2000mv10KΩ(BNC)
	Audio Output	1-ch audio output 200-3000mv 5KΩ(BNC)
Hard disk	Hard Disk	1 built-in SATA port; support 1 HDD.
	Hard Disk Space Consumption	Audio: 28.8MByte/h per channel Video: 56-900MByte/h per channel
Record and playback	Recording Mode	Manual recording, motion detection recording, schedule recording and alarm recording Priority: Manual recording> alarm recording>motion detection recording>schedule recording
	Recording Length	1 to 120 minutes single record duration (Default 60 minutes)
	Cyclic mode	When hard disk is full, system can overwrite previous video file.
	Record Search	Various search engines such as time, type and channel.
	Playback Mode	Various fast play, slow play speeds, manual frame by frame playback and reverse play mode.
	Various File Switch Ways	Can switch to previous or next file or any file in current play list. Can switch to file on other channel of the same time (if existing). Support continuous file playback, when a file is ended, system automatically plays the next file in the current channel
	Multi-channel Playback	Support maximum 16-channel simultaneous playback.
	Display Modes	Switch between adaptive window/full screen when playback
	Zoom	When in one-window full-screen playback mode, you can select any zone to zoom in.
Backup function	Backup Mode	HDD backup
		Support peripheral USB backup device. (Flash disk, portable HDD and etc.)
		Support USB burner (extension function).
		Support network download and backup
Network Function	Network control	Remote live view of all channels.
		DVR configuration through web browser client
		Upgrade or maintenance via web browser client
		View alarm information such as external alarm, motion detection and video loss
		Support network PTZ control
		File download backup and playback

		Duplex transparent COM
		Intercom
Motion Detection and Alarm	Motion Detection	Zone setup: support 396(22×18) detection zones. Various sensitivity levels Can activate recording or external alarm or screen message prompt in specified period.
	Video Loss	Alarm can activate external alarm or screen message prompt.
	External Alarm	Can activate recording or external alarm or screen message prompt in specified period.
	Manual Alarm Control	Enable or disable alarm input channel. Support manual alarm output.
	Alarm Input	16-ch alarm input（Normal open or normal close）
	Alarm Output	3-channel relay output
	Alarm Relay	30VDC 2A, 125VAC 1A（activation alarm）
Interface	USB Interface	2 USB 2.0 ports
	Network connection	RJ45 10M/100M self-adaptive Ethernet port
	RS485	PTZ control port Support Pelco-D PTZ control protocols.
	RS232	Ordinary serial port (for upgrade and maintenance) and transparent serial port (COM input and output via network)
System Information	Hard Disk Information	Display HDD current status
	Data Stream Statistics	Data stream statistics for each channel (in wave mode)
	Log statistics	Display maximum1024 logs. Support various search engines such as time and type.
	Version	Display version information: channel amount, alarm input and output amount, system version and published date.
	On-line user	Display current on-line user
User Management	User Management	Multi-lever user management; various management modes Integrated management for local user and network user Configurable user power
		Support user /group and its corresponding rights modification. No limit to the user or group amount
	Password Authentication	Password modification Administrator can modify other user's password.
		Account lock strategy Five times login failure in thirty minutes may result in account lock.
Upgrade		Web browser, client-end and specific update tool.
Login, Logout and Shutdown		Password login protection to guarantee safety
		User-friendly interface when login. Provide the following options: Logout /shutdown/ restart.
		Authentication when shut down to make sure only those proper people can turn off DVR
General Parameter	Power	DC +12V/3.3A
	Power Consumption	12W (Exclude HDD)
	Working Temperature	0℃—+55℃
	Working Humidity	10%—90%
	Air Pressure	86kpa—106kpa
	Dimension	375x285x45mm
	Weight	3.25KG(Exclude HDD)
	Installation Mode	Desktop installation

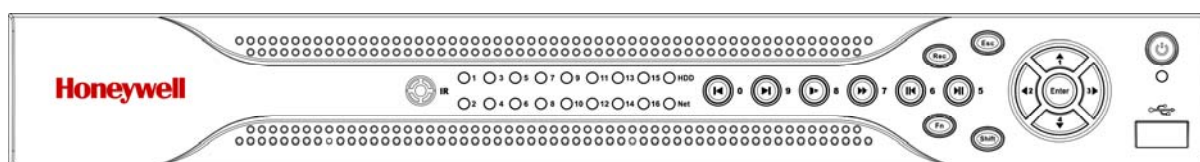
2 Overview and Controls

This section provides information about front panel and rear panel. When you install this series DVR for the first time, please refer to this part first.

Front Panel

The front panel is shown in *Figure 2-1*.

Figure 2-1 The Front Panel of HSRV-16



Please refer to the following sheet for front panel button information.

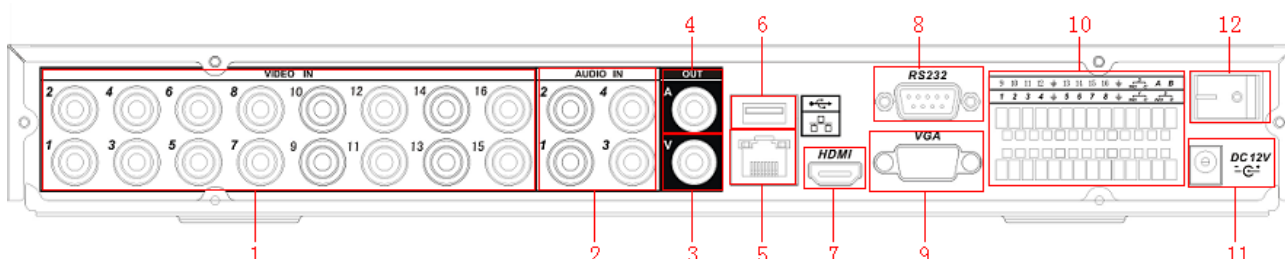
Name	Icon	Function
Power button		Power button, press this button for three seconds to boot up or shut down DVR.
Shift	Shift	In textbox, click this button to switch between numeral, English(Small/Capitalized),donation and etc.
Up/1 Down/4		Activate current control, modify setup, and then move up and down.
		Increase/decrease numeral.
		Assistant function such as PTZ menu.
		In text mode, input number 1/4.
Left/2 Right/3		Shift current activated control,
		When playback, click these buttons to control playback bar.
		In text mode, input number 2/3.
ESC	ESC	Go to previous menu, or cancel current operation.
		When playback, click it to restore real-time monitor mode.
Enter	ENTER	Confirm current operation
		Go to default button
		Go to menu
Record	REC	Manually stop/start recording, working with direction keys or numeral keys to select the recording channel.
Slow play/8		Multiple slow play speeds or normal playback. In text mode, input number 8.
Assistant	Fn	One-window monitor mode, click this button to display assistant function: PTZ control and image color.

		In PTZ menu, shift PTZ control menu.
		Backspace function: in numeral control or text control, it can delete the previous character before the cursor.
		In motion detection setup, working with Fn and direction keys to realize setup.
		In preview mode, click it for three seconds to switch between TV.VGA. For HD1 series DVR, there are three modes: TV, VGA, VGA_LCD (60Hz LED output).
		In text mode, click it to switch between numeral, English character(small/capitalized) and etc.
		Realize other special functions.
Fast play/7	»	Various fast speeds and normal playback. In text mode, input number 7.
Play previous/0	◀	In playback mode, playback the previous video In text mode, input number 0.
Reverse/Pause/6	II ◀	In normal playback or pause mode, click this button to reverse playback In reverse playback, click this button to pause playback. In text mode, input number 6.
Play Next/9	▶	In playback mode, playback the next video In menu setup, go to down ward of the dropdown list. In text mode, input number 9.
Play/Pause /5	▶ II	In normal playback click this button to pause playback In pause mode, click this button to resume playback. In text mode, input number 5.
USB port		To connect USB storage device, USB mouse.
Network abnormal indication light	Net	Network error occurs or there is no network connection, the light becomes red to alert you.
HDD abnormal indication light	HDD	HDD error occurs or HDD capacity is below specified threshold value, the light becomes red to alert you.
Record light	Alarm	System is recording or not. It becomes on when system is recording.
IR Receiver	IR	It is to receive the signal from the remote control.

Rear Panel

HSVR-16 rear panel is shown as below. See *Figure 2-2*.

Figure 2-2 The Rear Panel of HSVR-16



Please refer to the following table for detailed information.

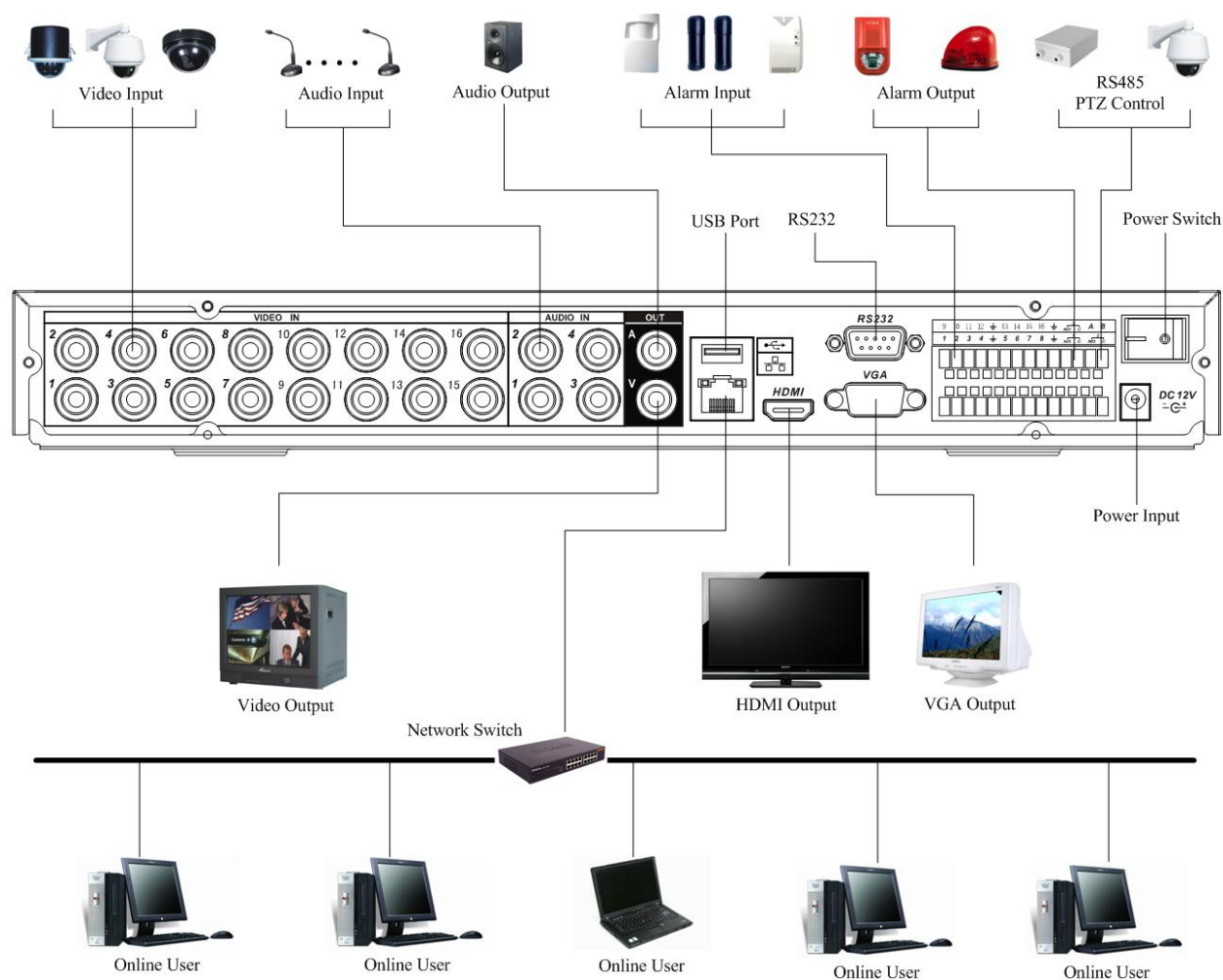
No.	Description
1	Video input
2	Audio input
3	Video CVBS output
4	Audio output
5	Network port
6	USB port
7	HDMI port
8	RS232 port
9	Video VGA output
10	Alarm input/alarm output/RS485 port
11	Power input port
12	Power button

When connect the Ethernet port, please use straight cable to connect the PC and use the crossover cable to connect to the switcher or router.

Connection Sample

Please refer to *Figure 2-3* for connection sample.

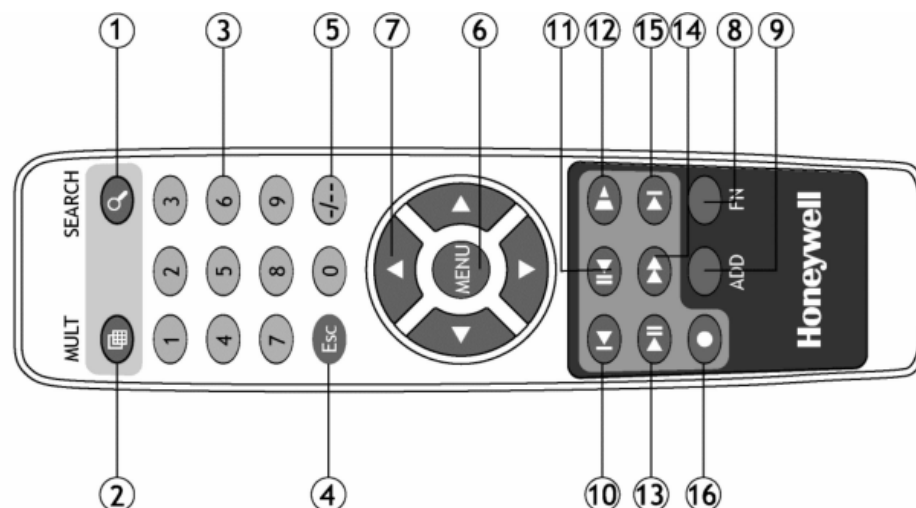
Figure 2-3 Device Connection



Remote Controller

The remote controller interface is shown as in *Figure 2-4*.

Figure 2-4 Remote Controller



Serial number	Function
1	Record search
2	Multiple-window switch
3	0-9 number keys
4	ESC, Cancel
5	Reserved, not effective for HSVR-16
6	Confirm /menu key
7	Direction keys
8	Auxiliary function key
9	Remote address switch
10	Previous
11	Backward playback
12	Slow play
13	Play/Pause
14	Fast play
15	Next
16	Record

Mouse Control

Left click mouse	System pops up password input dialogue box if you have not logged in. In real-time monitor mode, you can go to the main menu.
	When you have selected one menu item, left click mouse to view menu content.
	Implement the control operation.
	Modify checkbox or motion detection status.
	Click combo box to pop up drop down list

	In input box, you can select input methods. Left click the corresponding button on the panel you can input numeral/English character (small/capitalized). Here ← stands for backspace button. _ stands for space button. In English input mode: _ stands for input a backspace icon and ← stands for deleting the previous character.  In numeral input mode: _ stands for clear and ← stands for deleting the previous numeral.  When inputting special symbols, you can click corresponding numeral in the front panel to input. For example, click numeral 1 you can input"/", or you can click the numeral in the on-screen keyboard directly. 
Double left click mouse	Implement special control operation such as double click one item in the file list to playback the video. In multiple-window mode, double left click one channel to view in full-window. Double left click current video again to go back to previous multiple-window mode.
Right click mouse	In real-time monitor mode, pops up shortcut menu: one-window, four-window, nine-window and sixteen-window, Pan/Tilt/Zoom, color setting, search, record, alarm input, alarm output, main menu. Among which, Pan/Tilt/Zoom and color setting applies for current selected channel. If you are in multiple-window mode, system automatically switches to the corresponding channel.  Exit current menu without saving the modification.
Press middle button	In numeral input box: Increase or decrease numeral value. Switch the items in the check box.

	Page up or page down
Move mouse	Select current control or move control
Drag mouse	Select motion detection zone
	Select privacy mask zone.

3 Installation and Connections

Note

All the installation and operations here should conform to your local electrical safety rules

Check Unpacked DVR

When you receive the DVR from the forwarding agent, please check whether there is any visible damage. The protective materials used for the package of the DVR can protect most accidental clashes during transportation. Then you can open the box to check the accessories.

Please check the items in accordance with the list on the warranty card. Finally you can remove the protective film of the DVR.

About Front Panel and Rear Panel

For detail information of the function keys in the front panel and the ports in the rear panel, please refer to the *User's Manual* included in the resource CD.

The model in the front panel is very important; please check according to your purchase order.

The label in the rear panel is very important too. Usually we need you to represent the serial number when we provide the service after sales.

HDD Installation

This series DVR has only one SATA HDD. Please use HDD of 7200rpm or higher.

You can refer to the user guide for recommended HDD brand.

Please follow the instructions below to install hard disk.



1. Loosen the screws of the upper cover.



2. Remove upper cover.



3. Turn four screws for three rounds to fix HDD bracket.



4. Place the HDD in accordance with the four holes in the chassis.



5. Turn the device upside down and then turn the screw in firmly.



6. Fix the HDD firmly.



7. Connect the HDD cable and power cable.



8. Place the upper cover back and screw firmly.

After completing HDD installation, please check connection of data ribbon and power cord.

Connecting Power Supply

Please check input voltage and device power button match or not.

We recommend you use UPS to guarantee steady operation, DVR life span, and other peripheral equipments operation such as cameras.

Connecting Video Input and Output Devices

Connecting Video Input

The video input interface is BNC. The input video format includes: PAL/NTSC BNC(1.0V_{P-P}, 75Ω).

The video signal should comply with your national standards.

The input video signal should have high SNR, low distortion, low interference, natural color and suitable lightness.

Guarantee the stability and reliability of the camera signal:

The camera should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances, etc.

The camera and the DVR should have the same grounding to ensure normal operation of the camera.

Guarantee the stability and reliability of the transmission line

Please use high quality, sound shielded BNC. Please select suitable BNC model according to the transmission distance.

If the distance is too long, you should use twisted pair cable, and you can add video compensation devices or use optical fiber to ensure video quality.

You should keep the video signal away from the strong electromagnetic interference, especially the high tension current.

Keep connection lugs in well contact

The signal line and shielded wire should be fixed firmly and in well connection. Avoid dry joint, lap welding and oxidation.

Connecting Video Output

Video output includes BNC (CVBS PAL/NTSC, 1.0VP-P, 75Ω), VGA and HDMI.

The system supports the three kinds of outputs at the same time.

When you are using PC monitor to replace standard CCTV monitor, please pay attention to the following points:

- To extend the product's life, do not run the pc monitor for a long time.
- Regular demagnetization will keep device maintaining proper status.
- Keep it away from strong electromagnetic interference devices.

Using TV as video output device is not a reliable substitution method. You also need to reduce the working hour and control the interference from power supply and other devices. The low quality TV may result in device damage.

Connecting Audio Input & Output

Audio Input

Use the BNC connector to connect the audio channel.

Due to high impedance of audio input, please use active sound pick-up.

Audio transmission is similar to video transmission. Try to avoid interference, dry joint, loose contact and it shall be away from high tension current

Audio Output

The audio output signal parameter is usually over 200mv 1KΩ (BNC). It can directly connect to low impedance earphone, active sound box or amplifier-drive audio output device.

If the sound box and the pick-up cannot be separated spatially, it is easy to arouse squeaking. In this case you can adopt the following measures:

- Use better sound pick-up with better directing property.
- Reduce the volume of the sound box.
- Using more sound-absorbing materials in decoration can reduce voice echo and improve acoustics environment.
- Adjust the layout to reduce happening of the squeaking.

Alarm Input and Output Connection

Please refer to the following sheet for alarm input and output connection.

There are two alarm input types for you to select: normal open (NO) and normal close (NC).

1. Alarm input
 - a Please make sure alarm input mode is grounding alarm input.
 - b Grounding signal is needed for alarm input.
 - c When you are connecting two DVRs or you are connecting one DVR and one other device, please use a relay to separate them
2. Alarm output

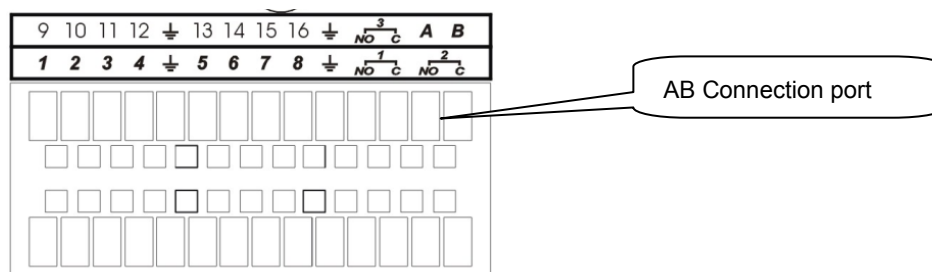
The alarm output port should not be connected to high power load directly (It shall be less than 1A) to avoid high current which may result in relay damage. Please use the co contactor to realize the connection between the alarm output port and the load.
3. Please make sure the front-end devices have been well earthed.

Improper grounding may result in chip damage.

Alarm Input and Output Details

You can refer to the following sheet and *Figure 3-1* for alarm input and output information.

Figure 3-1 Alarm Input and Output Information



Parameter	Grounding Alarm
	Ground line
Alarm Input	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16. They become valid in low voltage.
Relay Output	1-NO C, 2-NO C, 3-NO C Three NO activation outputs.
485 A/B	485 communication port. They are used to control devices such as PTZ. Please parallel connect 120Ω between A/B cables if there are too many PTZ decoders.

Alarm Input Port

Please refer to the following sheet for more information.

16-ch grounding alarm inputs. (Normal open or Normal close type)

Please parallel connect COM end and GND end of the alarm detector (Provide external power to the alarm detector).

Please parallel connect the Ground of the DVR and the ground of the alarm detector.

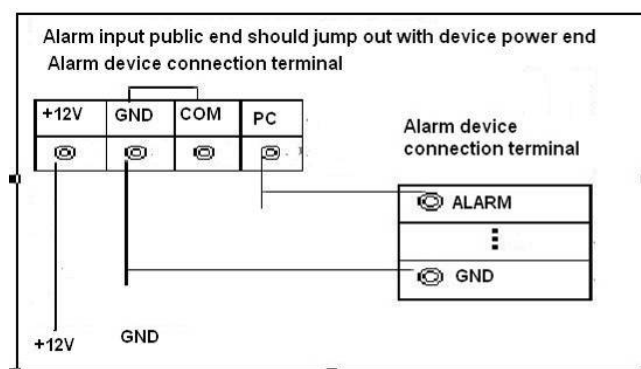
Please connect the NC port of the alarm sensor to the DVR alarm input(ALARM)

Use the same ground with that of DVR if you use external power to the alarm device.

Note

Only indoor devices are recommended being connected to HSVR-16 alarm inputs.

Figure 3-2 Sample of Alarm Input (Normal Close Type)



Alarm Output Port

- 3 ways relay alarm output (NO contact). Provide external power to external alarm device.
- To avoid overloading, please read the following relay parameters sheet carefully.
- RS485 A/B cable is for the A/B cable of the PTZ decoder.

Relay Specification:

Model	JRC-27F	
Material of the touch	Silver	
Rating (Resistance Load)	Rated switch capacity	30VDC 2A, 125VAC 1A
	Maximum switch power	125VA 160W
	Maximum switch voltage	250VAC, 220VDC
	Maximum switch current	1A
Insulation	Between touches with same polarity	1000VAC 1minute
	Between touches with different polarity	1000VAC 1minute
	Between touch and winding	1000VAC 1minute
Surge voltage	Between touches with same polarity	1500V (10×160us)
Length of open time	3ms max	
Length of close time	3ms max	
Longevity	Mechanical	50×10 ⁶ times (3Hz)
	Electrical	200×10 ³ times (0.5Hz)

Temperature	-40°C ~ +70°C
-------------	---------------

RS232

RS232 port is reserved for technical support diagnosis and upgrade.

RS485

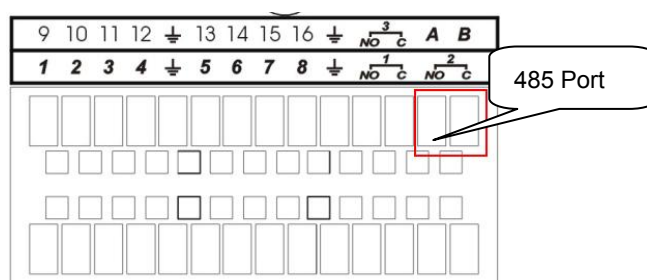
When the DVR receives a camera control command, it transmits that command up the coaxial cable to the PTZ device. RS485 is a single-direction protocol; the PTZ device can't return any data to the unit. To enable the operation, connect the PTZ device to the RS485 (A,B) input on the DVR. See [Figure 3-3](#).

Since RS485 is disabled by default for each camera, you must enable the PTZ settings first. This series DVRs support multiple protocols such as Pelco-D, Pelco-P.

To connect PTZ devices to the DVR:

1. Connect RS485 A,B on the DVR rear panel.
 - a. Ensure the decoder has the same grounding with DVR, otherwise you may not control the PTZ. Shielded twisted wire is recommended and the shielded layer is used to connect to the grounding.
 - b. Avoid high voltage. Ensure proper wiring and some thunder protection measures.
 - c. For too long signal wires, 120Ω should be parallel connected between A, B lines on the far end to reduce reflection and guarantee the signal quality.
 - d. "485 A, B" of DVR cannot parallel connect with "485 port" of other device.
 - e. The voltage between of A,B lines of the decoder should be less than 5v.
2. Connect the other end of the cable to the proper pins in the connector on the camera.
3. Please follow the instructions to configure a camera to enable each PTZ device on the DVR.

Figure 3-3 PTZ Connection Port



USB

The USB port is for USB storage device and USB mouse. For USB Backup, please refer to 4.7 for detailed operation.

4 Overview of Navigation and Controls

Before operation, please make sure you have properly installed HDD and all the cable connections.

Login, Logout & Main Menu

Login

After system booted up, default video display is in multiple-window mode.

Click Enter or left click mouse, you can see the login interface. See *Figure 4-1*.

System consists of four accounts:

- Username: admin. Password: admin. (administrator, local and network)
- Username: 888888. Password: 888888. (administrator, local only)
- Username: 666666. Passwords: 666666 (Lower authority user who can only monitor, playback, backup and etc.)
- Username: default. Password: default (hidden user)

You can use USB mouse, front panel, remote controller or keyboard to input. About input method: Click **123** to switch between numeral, English character (small/capitalized) and denotation.

Note

For security reasons, please modify the password after your first login.

Within 30 minutes, three times login failure will result in system alarm buzz and five times login failure will result in account lock!

Figure 4-1 Menu Login



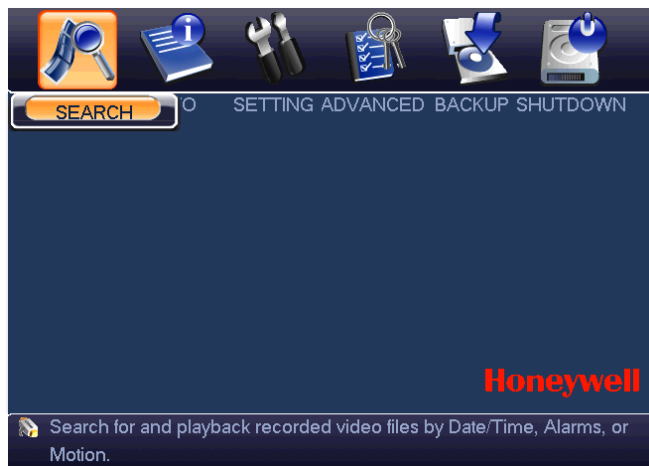
Main Menu

After you logged in, the system main menu is shown as below. See *Figure 4-2*.

There are total six icons: search, information, setting, backup, advanced and shutdown.

You can move the cursor to highlight the icon, and then double-click mouse to enter the sub-menu.

Figure 4-2 Main Menu



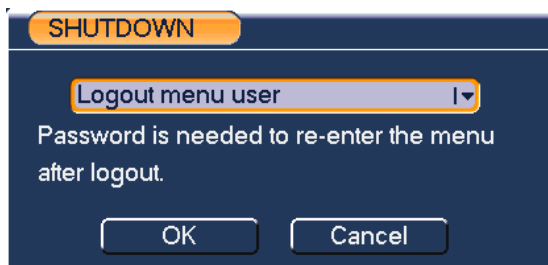
Logout

There are two ways for you to log out.

One is from menu option:

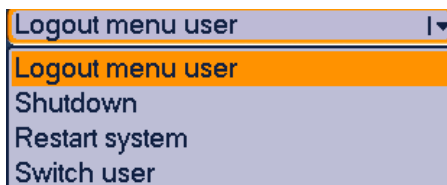
In the main menu, click shutdown button, you can see an interface is shown as below. See [Figure 4-3](#).

Figure 4-3 Logout Menu



There are several options for you. See [Figure 4-4](#).

Figure 4-4 Options for Logout



The other ways is to press power button on the front panel for at least 3 seconds, system will stop all operations. Then you can click the power button in the rear panel to turn off the DVR.

Auto Resume after Power Failure

The system can automatically backup video and resume previous working status after power failure.

Replace Button Battery

Please make sure to use the same battery model if possible.

We recommend replace battery regularly (such as one-year) to guarantee system time accuracy.

Manual Record

Live Viewing

After you logged in, the system is in live viewing mode. You can see system date, time and channel name. If you want to change system date and time, you can refer to general settings (**Main Menu**→**Setting**→**General**). If you want to modify the channel name, refer to the display settings (**Main Menu**→**Setting**→**Display**).

1		Recording status	3		Video loss
2		Motion detection	4		Camera lock

Note

Live audio will only be played under single channel video display mode.

Manual Record

Note

You need to have proper rights to implement the following operations. Please make sure the HDD has been properly installed.

Manual Record Menu

There are two ways for you to go to manual record menu.

- Right-click mouse or in the main menu, **Advanced**→**Manual Record**.
- In live viewing mode, click record button in the front panel or record button in the remote control.

Manual record menu is shown in *Figure 4-5*.

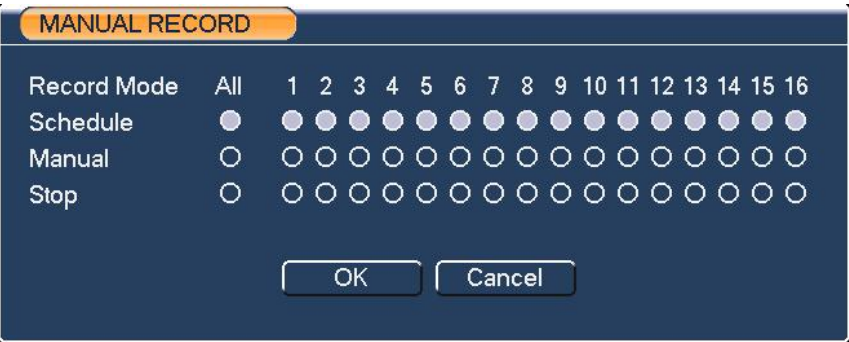
Basic Operations

There are three modes: schedule/manual/stop. Please highlight icon"○" to select corresponding channel.

- Manual: The highest priority. After being set to manual mode, all selected channels will start regular (continuous) recording.

- Automatic: Channel recording follows the set in recording schedule setup (Main Menu→Setting→Schedule)
- Closed: the channel stops recording.

Figure 4-5 Recording Control Menu

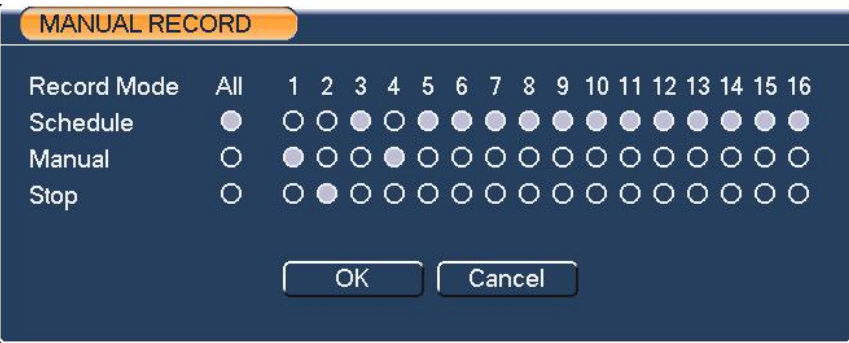


Enable/disable recording in specified channels

Please check current channel status: “○” means it is not in recording status, “●” means it is in recording status.

You can use mouse or direction key to highlight channel number. See [Figure 4-6](#).

Figure 4-6 Different Status of Manual Record

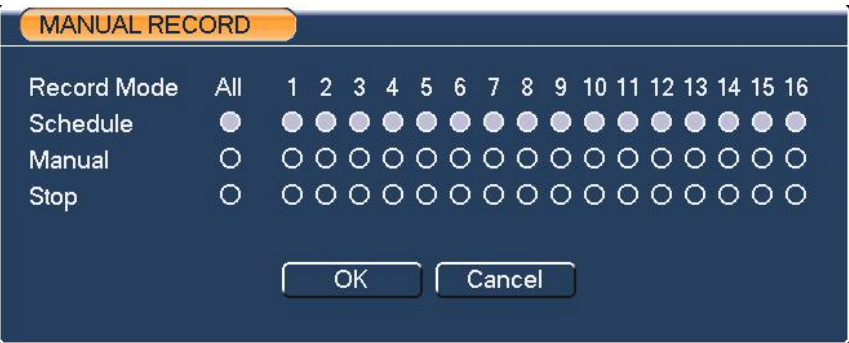


Enable/disable recording in all channels

Highlight ○ below All, you can enable all channel recording.

- Automatic recording in all channels
Highlight “ALL” after “Automatic”. See [Figure 4-7](#).
When system is in automatic recording, all channels will be recorded as you set in **Main menu→Setting→Schedule**.
The corresponding indication light in front panel will turn on.

Figure 4-7 Automatic Recording in All Channels



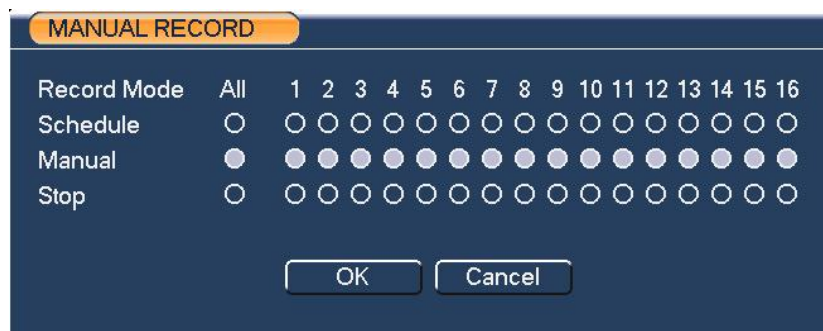
- Manual recording in all channels

Highlight "ALL" after "Manual." See [Figure 4-8](#).

When system is in manual recording, all scheduled set up you have set in will be null (**Main menu→Setting→Schedule**).

You can see indication light in front panel turns on, system begins manual record now.

Figure 4-8 Start Manual Record in All Channels

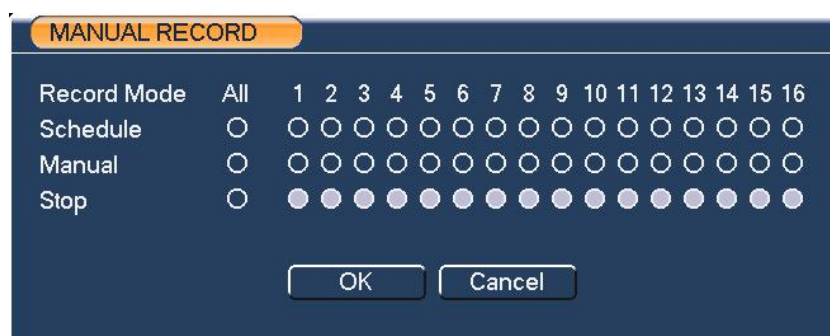


Stop all channel recording

Please highlight "ALL" after "Closed". See [Figure 4-9](#).

System stops all channel recording no matter what mode you have set in the menu (**Main menu→Setting→Schedule**).

Figure 4-9 Stop Recording in All Channels



Search & Playback

Search Menu

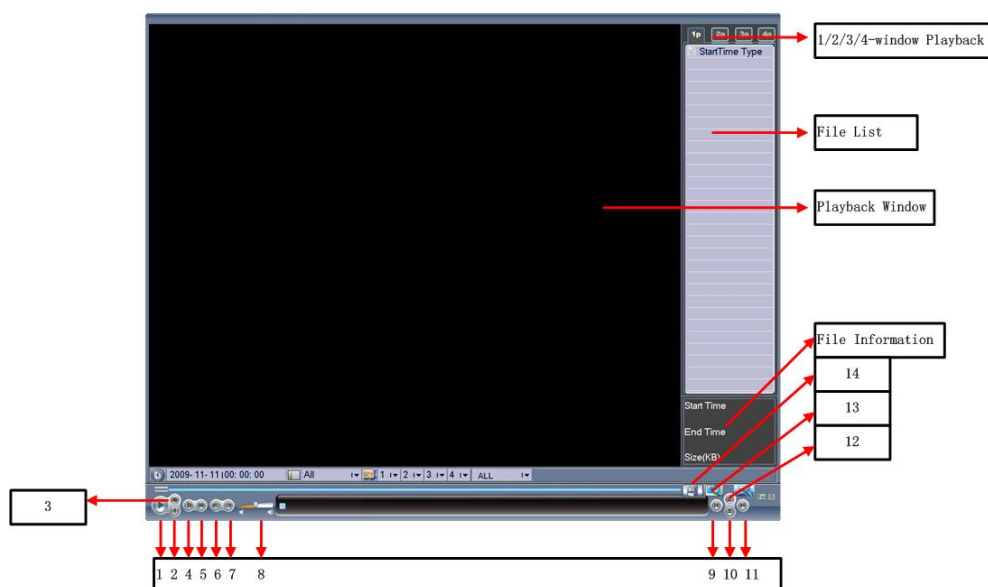
Click search button in the main menu, search interface is shown as below. See [Figure 4-10](#).

Usually there are three file types:

- R: Regular recording file.
- A: External alarm recording file.
- M: Motion detection recording file

There are several playback windows. Usually system supports 1/2/3/4/all-ch playback.

Figure 4-10 Record Search Menu



Please refer to the following sheet for more information.

Serial Number	Function
1	Play
2	Backward
3	Stop
4	Slow play
5	Fast play
6	Previous frame
7	Next frame
8	Volume
9	Previous file
10	Next channel
11	Next file
12	Previous channel
13	Search
14	Backup

Basic Operation

Playback

There are various search modes: video type, channel number or time. The system can max display 128 files in one screen. You can use page up/down button to view if there are more than one page.

Select the file name and double click mouse (or click enter button), you can view file content.

Accurate playback

Input time (h/m/s) in the time column and then click playback button, system can operate accurate playback.

Synchronized playback function when playback

During playback process, click numeral key, system can switch to the corresponding channel video of the same time.

Digital zoom

When the system is in full-screen playback mode, drag your mouse in the screen to select a section and then left click mouse to realize digital zoom. You can right click mouse to exit.

File backup

System supports backup operation during search. You can draw a √ before file name (multiple choices). Then click backup button (Button 14 in *Figure 4-10*).

Slow playback and fast playback

Please refer to the following sheet for slow play and fast playback function.

Button	Illustration	Remarks
Fast play button ►►	In playback mode, click this button to switch between various fast play modes such as fast play 1, fast play 2 and more.	Frame rate may vary due to different versions.
Slow play button ►	In playback mode, click this button to switch between various slow play modes such as slow play 1 or slow play 2.	
Play/Pause ►/	In slow playback mode, click this button to switch between play/pause modes.	
Previous/next	In playback mode, you can click ◀ and ▶ to view previous or next video in current channel.	

Backward playback and frame by frame playback

Button	Illustration	Remarks
Backward play: ◀ in playback interface.	In normal playback mode, left click backward play button ◀, system begins backward playback. Double click backward play button again, system goes to pause mode.	When system is in backward play or frame by frame playback mode, you can click play button ►/ to go to normal playback.
Manual playback frame by frame.	Click pause button in normal playback mode, you can use ◀ and ▶ to view frame by frame.	

Note

All the operations here (such as playback speed, channel, time and progress) have relationship with hardware version. Some series DVRs do not support some functions or playback speeds.

Calendar



Click calendar icon in *Figure 4-10*, system pops up a calendar for your reference.

The highlighted date means there are record files in that day. You can click blue date to view file list.

In *Figure 4-11*, there are video files in March 13th and 14th. Double-click the date to view file list.

Figure 4-11 Sample of the Calendar



Schedule

After system booted up, it is in default 24-hour regular mode. You can set record type and time in schedule interface.

Schedule Menu

In the main menu, from setting to schedule, you can go to schedule menu. See *Figure 4-12*.

- Channel: Please select the channel number first. You can select “all” if you want to set for the whole channels.
- Week day: There are eight options: ranges from Saturday to Sunday and all.
- Pre-record: System can pre-record the video before the event occurs into the file. The value ranges from 1 to 30 seconds depending on the bit stream.
- Redundancy: Please note redundancy function **does not** applies to 1U series since there is only one HDD,
- Record types: There are three types: regular, motion detection (MD) and Alarm.

Please highlight icon  to select the corresponding function. After completing all the setups please click save button, system goes back to the previous menu.

At the bottom of the menu, there are color bars for your reference. Green color stands for regular recording, yellow color stands for motion detection and red color stands for alarm recording.

Figure 4-12 Schedule Menu

SCHEDULE

Channel 1 PreRecord 4 sec.Redundancy

Week Day	Mon	Record Type	Regular	MD	Alarm
Period 1	00 :00 -24 :00		☒	☒	☒
Period 2	00 :00 -24 :00		☐	☐	☐
Period 3	00 :00 -24 :00		☐	☐	☐
Period 4	00 :00 -24 :00		☐	☐	☐
Period 5	00 :00 -24 :00		☐	☐	☐
Period 6	00 :00 -24 :00		☐	☐	☐

☒ Regular
 ☐ MD
 ☐ Alarm

0 3 6 9 12 15 18 21 24

Copy Paste Default Save Cancel

Quick Setup

This function allows you to copy one channel setup to another. After setting one channel, you can click Copy button and switch to another channel and then click Paste button. You can finish setting one channel and then click Save button to keep the setting of that channel, or you can finish all setup and then click Save button to keep all the modified settings.

Detect

Go to Detect Menu

In the main menu, from Setting to Detect, you can see motion detect interface. See [Figure 4-13](#). There are three detection types: motion detection, video loss, camera masking.

Motion Detection

Detection menu is shown as below. See [Figure 4-13](#).

- Event type: From the drop-down list you can select the "Motion Detection" type.
- Channel: Select the video channel for motion detection setting.
- Record Channel: Select the channel to activate recording function once alarm occurred. Please make sure you have set MD recording in schedule interface(**Main Menu→Setting→Schedule**) and automatic recording in manual record interface(Main Menu->Advanced->Manual Record)
- Delay: when detected motion is completed, system continues alarm output and recording for a specified time respectively. The value ranges from 10-300(Unit: second).
- Region: Click **Select**, the interface is shown as in [Figure 4-14](#). Here you can set motion detection zone. There are 396(PAL)/330(NTSC) small zones.
- Sensitivity: System supports 6 levels. The sixth level has the highest sensitivity. The fifth or lower levels are recommended to avoid false alarm.

- Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.
- Send email: System can send out email to alert you when alarm occurs.
- PTZ activation: Here you can set PTZ movement (of any video channels) such as going to a preset when motion is detected in current video channel. Click **Select**, and you can see an interface is shown as in *Figure 4-15*.
- Period: Click **Set** to set the period for the channel to be armed for motion detection, you can see an interface is shown as in *Figure 4-16*. Here you can set for business day and non-business day. In *Figure 4-16*, click **Set**, and you can see an interface is shown as in *Figure 4-17*. Here you can set your own business day and non-business day.
- Alarm output: When motion detection occurred, system enables peripheral alarm devices.
- Tour: Here you can enable tour function when alarm occurs. It is a one-window tour. Please go to chapter 5.3.9 Display for tour interval setup.

Note

If there're record channels selected, only the record channels will be displayed in the tour.

Highlight icon  to select the corresponding function. After all the settings, click **Save**, and the system goes back to the previous menu.

Note

In *Figure 4-14*, you can left click mouse and then drag it to set a region for motion detection. Click **Fn** to switch between arm/withdraw motion detection. After setting, click enter button to exit.

Figure 4-13 Motion Detection Menu



Honeywell

DETECT

Event Type: Motion Detect | Channel: 1

Enable: ☒

Region: Select | Sensitivity: 3

Period: Set

☐ Alarm Out | ☒ 2 3 | Latch: 10 sec.

☐ Show Message | ☐ Send Email

☒ Record Channel | ☒ 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

☐ PTZ Activation | Select | Delay: 10 sec.

☐ Tour | ☒ 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Copy Paste Default Save Cancel

Figure 4-14 Motion Detection Zone Setting

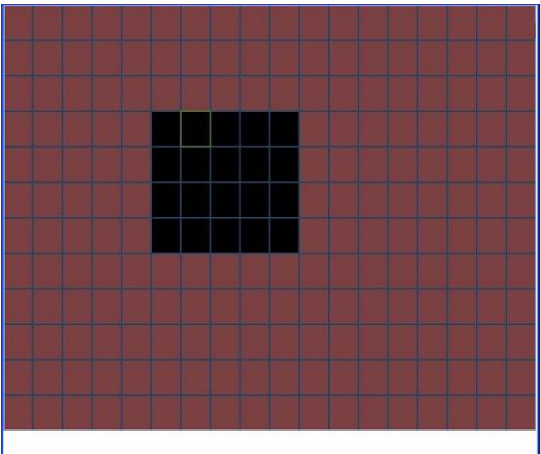


Figure 4-15 PTZ Activation Setting

PTZ Activation

CAM 1	None	I▼	0	CAM 2	None	I▼	0
CAM 3	None	I▼	0	CAM 4	None	I▼	0
CAM 5	None	I▼	0	CAM 6	None	I▼	0
CAM 7	None	I▼	0	CAM 8	None	I▼	0
CAM 9	None	I▼	0	CAM 10	None	I▼	0
CAM 11	None	I▼	0	CAM 12	None	I▼	0
CAM 13	None	I▼	0	CAM 14	None	I▼	0
CAM 15	None	I▼	0	CAM 16	None	I▼	0

OK Cancel

Figure 4-16 Armed Period Setting

Honeywell

Set

Work Day I▼ Set

☒	00 :00	-24 :00	☐	00 :00	-24 :00
☐	00 :00	-24 :00	☐	00 :00	-24 :00
☐	00 :00	-24 :00	☐	00 :00	-24 :00

Sun
Mon
Tue
Wed
Thu
Fri
Sat

0 3 6 9 12 15 18 21 24

0 3 6 9 12 15 18 21 24

Copy Paste Default OK Cancel

Figure 4-17 Business Day and Non-Business Day Setting

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Work Day	☐	☒	☒	☒	☒	☒	☐
Free Day	☒	☐	☐	☐	☐	☐	☒

Save Cancel

Video Loss

In [Figure 4-13](#), select “Video Loss” from the type list. You can see the interface is shown in [Figure 4-18](#). This function allows you to be informed when video loss phenomenon occurred. You can enable alarm output channel and then enable the show message function.

Tips:

You can enable preset activation operation when video loss occurs.

See [Motion Detection](#) on page 26 for detailed information.

Figure 4-18 Menu of Video Loss

Event Type: Video Loss Channel: 1

Enable: ☒

Period: Set

Alarm Out: ☐ 1 2 3 Latch: 10 sec.

Show Message: ☐ Send Email: ☐

Record Channel: ☒ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

PTZ Activation: ☐ Select Delay: 10 sec.

Tour: ☐ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Copy Paste Default Save Cancel

Camera Masking

When someone viciously masks lens, the system can alert you to guarantee video continuity. Camera masking interface is shown as in [Figure 4-19](#).

Tips:

You can enable preset/tour/pattern activation operation when video loss occurs.

See [Motion Detection](#) on page 26 for detailed information.

Note

In “Detect” interface, copy/paste function is only valid for the same type, which means you can not copy a channel setup in video loss mode to camera masking mode.

Figure 4-19 Menu of Camera Masking



Alarm Setup and Alarm Activation

Before operation, make sure you have properly connected alarm devices such as buzzer.

Go to alarm setup interface

On the main menu, from Setting to Alarm, you can see alarm setup interface. See [Figure 4-20](#).

Alarm setup

Alarm interface is shown as below. See [Figure 4-20](#).

- Alarm in: Here is for you to select alarm input channel number.
- Event type: There are two types. One is local input and the other is network input.
- Type: Normally open or normally close.
- PTZ activation: Here you can set PTZ movement when alarm occurs. Such as go to preset, tour& pattern when there is an alarm. Click **Select**, and you can see an interface is shown as in [Figure 4-24](#).
- Period: Click **Set**, and you can see an interface is shown in [Figure 4-22](#). Here you can set for business day and non-business day. In [Figure 4-25](#), click **Set**, and you can see an interface shown in [Figure 4-26](#). Here you can set your own setup for business day and non-business day.
- Show message: System can pop up a message to alarm you in the local host screen if you enabled this function.
- Send email: System can send out email to alert you when alarm occurs.

- Record channel: You can select proper channel to record alarm video (Multiple choices). At the same time you need to set alarm recording in schedule interface (**Main Menu→Setting→Schedule**) and select automatic record in manual record interface (**Main Menu→Advance→Manual Record**).
- Alarm output: When alarm occurred, system enables peripheral alarm devices.
- Delay: When input alarm is completed, system continues alarm output and/or recording for a specified time respectively. The value ranges from 10-300(Unit: second)
- Tour: Here you can enable tour function when alarm occurs. It is a one-window tour; go to chapter 5.3.9 Display for tour interval setup.

Note If there are record channels selected, only the record channels will be displayed in the tour.

For snapshot operation, please refer to chapter 4.4.2.

Highlight icon  to select the corresponding function. After completing all the settings, click **Save**, and the system goes back to the previous menu.

Figure 4-20 Menu of the Local Alarm



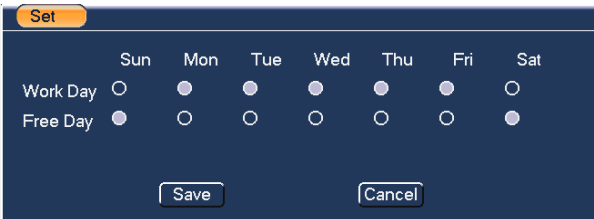
Figure 4-21 The settings of PTZ Activation



Figure 4-22 Period Setup



Figure 4-23 The Settings of Business Day and Non-Business Day



Backup

DVR support various backup devices such as CD-RW, DVD driver, USB backup and network download. The records can be played in PC by Record Player in the CD. Here we introduce USB backup first. You can refer to Chapter 7 Web Client Operation for network download backup operation.

Note that the flash disk or portable HDD shall be FAT or FAT 32 file system.

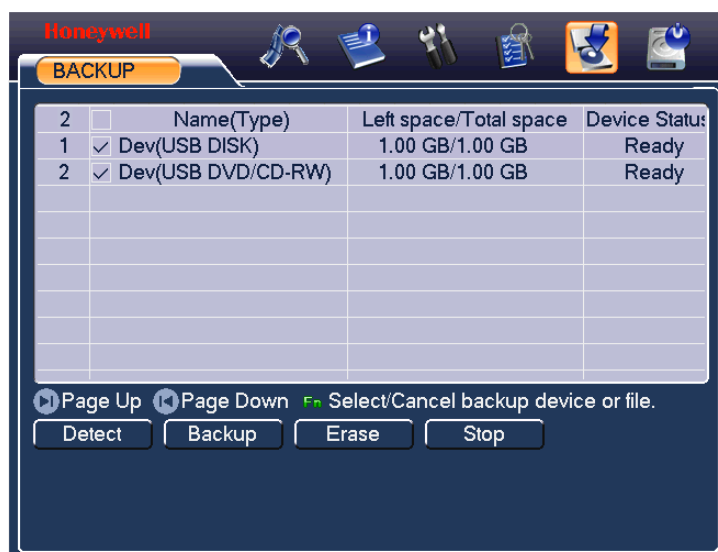
Detect Device

Click **Backup**, and you can see an interface shown in *Figure 4-24*. Here is for you to view devices information.

You can view backup device name and its total space and free space. The device includes USB burner, flash disk, SD card and portable HDD.

Note The USB Flash Disk models listed in Appendix B are strongly recommended, models of other brand may not be fully compatible.

Figure 4-24 Device Detection Menu of Backup



Backup

Select backup device and then set channel, file start time and end time.

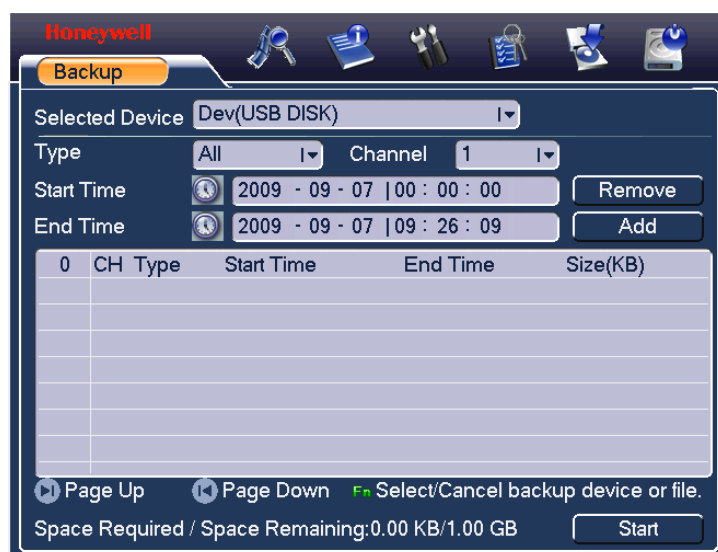
Click **Add**, and system begins searching. All matched files are listed below. System automatically calculates the capacity needed and remained. See [Figure 4-25](#).

The system only backs up the files with a ✓ before channel name. You can click **Fn** or **Cancel** to delete ✓ after file serial number.

Click **Backup**, and you can back up the selected files. There is a process bar for you reference.

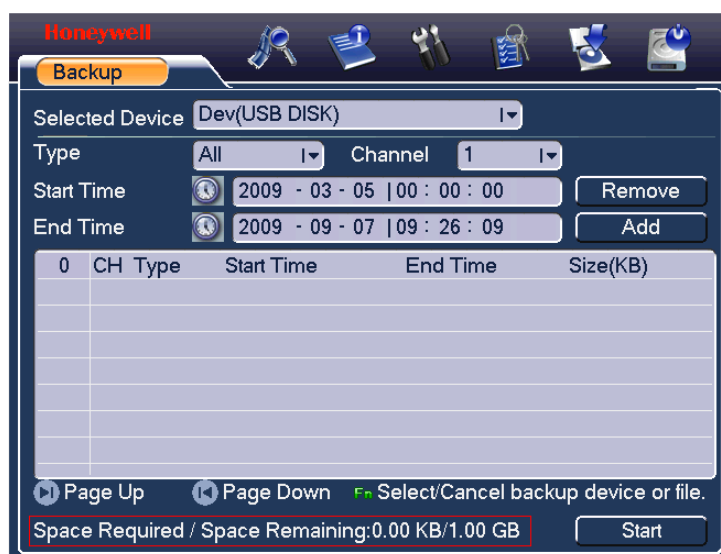
When the system completes backup, you can see a dialogue box prompting successful backup.

Figure 4-25 Searching Results and Backup Menu



Click **Backup**, and the system begins burning. At the same time, the **Backup** button changes to the **Stop** button. You can view the remaining time and process bar at the bottom left. See [Figure 4-26](#).

Figure 4-26 Searching Results and Backup Menu (fig error)



The file name format usually is: SN_CH+channel number+time Y+M+D+H+M+S. In the file name, the YDM format is the same as you set in general interface (**Main Menu→Setting→General**). The file extension name is “.dav”. You can visit our website to view listed CD-ROM brand.

Tips:

During the backup process, you can click **ESC** to exit current interface for other operation. The system will not terminate backup process.

Note

When you click **Stop** during the burning process, the stop function becomes activated immediately. For example, if there are ten files, when you click **Stop**, the system just backup five files, system only save the previous 5 files in the device (But you can view ten file names).

PTZ Control and Color Setup

Note

The operations described here are mainly based on PELCO-D protocol for Honeywell HSPT-120 speed dome. For other protocols, there might be a little difference.

Cable Connection

Please follow the procedures below to go on cable connection

- Connect the dome RS485 port to DVR 485 port.
- Connect dome video output cable to DVR video input port.
- Connect power adapter to the dome.

PTZ Setup

The camera video should be in the current screen. Before setup, check whether the following connections are right:

Note

- PTZ and decoder connection is right. Decoder address setup is right.
- Decoder A (RS485 +) / B (RS485 -) line connects with DVR A/B line.

Boot up the DVR, and input the user name and password.

In the main menu, select **Setting→Pan/Tilt/Zoom**. The interface is shown as in *Figure 4-27*. Here you can set the following items:

- Channel: Select the channel connected with the speed dome video port.
- Protocol: Select the corresponding PTZ protocol (such as PELCOD)
- Address: Identical to the device address set in the speed dome. Default address is 1.
- Baud rate: Select corresponding baud rate. 2400 for Pelco-D protocol.
- Data bits: Select corresponding data bits. Default value is 8.
- Stop bits: Select corresponding stop bits. Default value is 1.
- Parity: There are three options: Odd/Even/None. The default value is None.

Figure 4-27 PTZ Setup Menu

The screenshot shows a software window titled 'Honeywell' with a sub-header 'PAN/TILT/ZOOM'. Inside the window, there are seven configuration items, each with a label and a dropdown menu:

- Channel: 1
- Protocol: PELCOD
- Address: 1
- Baudrate: 9600
- Data Bits: 8
- Stop Bits: 1
- Parity: None

At the bottom of the window, there are five buttons: 'Copy', 'Paste', 'Default', 'Save', and 'Cancel'.

After completing all the setting click **Save**.

In single window display (View 1) mode, right-click to open the interface shown in *Figure 4-28* (clicking **Fn** in the front panel or in the remote controller will pop up a menu with only Pan/Tilt/Zoom and Color Setting options).

Figure 4-28 The Context Menu



Click **Pan/Tilt/Zoom**, and the interface is shown as below. See [Figure 4-29](#).

Here you can set the following items:

- Step: value ranges from 1 to 8.
- 8 direction arrows for PTZ position adjustment
- Zoom
- Focus
- Iris

Click the buttons  and  to adjust zoom, focus and iris.

Note Zoom, Focus and Iris are not supported by HSPT-120.

Figure 4-29 PTZ Control Menu



PTZ Trace

Please make sure your protocol supports this function and you need to use mouse to control.

Click **PTZ Trace** in [Figure 4-29](#), and the system goes back to the single window display. Drag the mouse in the screen to Pan and Tilt automatically.

Here is a table of front panel key functions in PTZ operation for your reference.

Name	Function key	function	Shortcut key	Function key	function	Shortcut Key
Zoom		Near			Far	
Focus		Near			Far	
Iris		close			Open	

Preset/Tour/Pattern/Scan Operations

In *Figure 4-29*, click **Set**. The interface is shown as below. See *Figure 4-30*.

Here you can set the following items:

- Preset
- Tour
- Pattern
- Border

Figure 4-30 PTZ Setup Menu

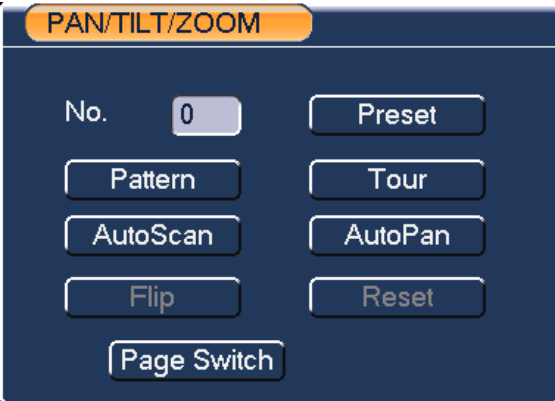


In *Figure 4-29*, click **Page Switch**, and the interface is shown in *Figure 4-31*.

Here you can activate the following functions:

- Preset
- Tour
- Pattern
- Auto scan
- Auto pan

Figure 4-31 Function Menu



Note

- Preset, tour and pattern all need the value to be the control parameter. You can define it as you require.
- You need to refer to your speed dome user’s manual for auxiliary function definition. In some cases, it can be used for special process.
- The following setups are usually performed in the interfaces shown in *Figure 4-29*, *Figure 4-30* and *Figure 4-31*.

Preset Setup

In *Figure 4-29*, use eight direction arrows to adjust camera to the proper position.
In *Figure 4-30*, click **Preset** and input the preset number. Clicking **Set** will save the preset.
Now you can add this preset to one tour.

Figure 4-32 Preset Setup



Activate Preset

In *Figure 4-31*, input the preset number in the “No.” field, and click **Preset**.

Patrol setup (Tour Setup)

In [Figure 4-30](#), click **Patrol**. The interface is shown in [Figure 4-33](#). Input the preset number and add this preset to a patrol (tour). For each patrol (tour), you can input 80 presets at most.

Figure 4-33 Tour Setup

Activate Patrol (tour)

In [Figure 4-30](#), input patrol (tour) number in the No. blank and click patrol button

Pattern Setup

In [Figure 4-30](#), click **Pattern** and then click “**begin**”. The interface is shown as in [Figure 4-34](#). Then you can go to [Figure 4-29](#) to modify zoom, focus, and iris.

Go back to [Figure 4-34](#) and click **End**. You can memorize all these operations as pattern 1.

Figure 4-34 Pattern Setup

Activate Pattern Function

In [Figure 4-31](#), input a mode value in the “No.” field, and click **Pattern**.

Note Pattern is not supported by HSPT-120.

Auto Scan Setup

In *Figure 4-30*, click **Border**. The interface is shown in *Figure 4-27*.

Please go to *Figure 4-29*, use direction arrows to select camera left limit.

Then please go to *Figure 4-35* and click left limit button

Repeat the above procedures to set right limit.

Figure 4-35 Auto Scan Setup



Activate Auto Scan

In *Figure 4-31*, click **Auto Scan**, and the system begins to auto scan.

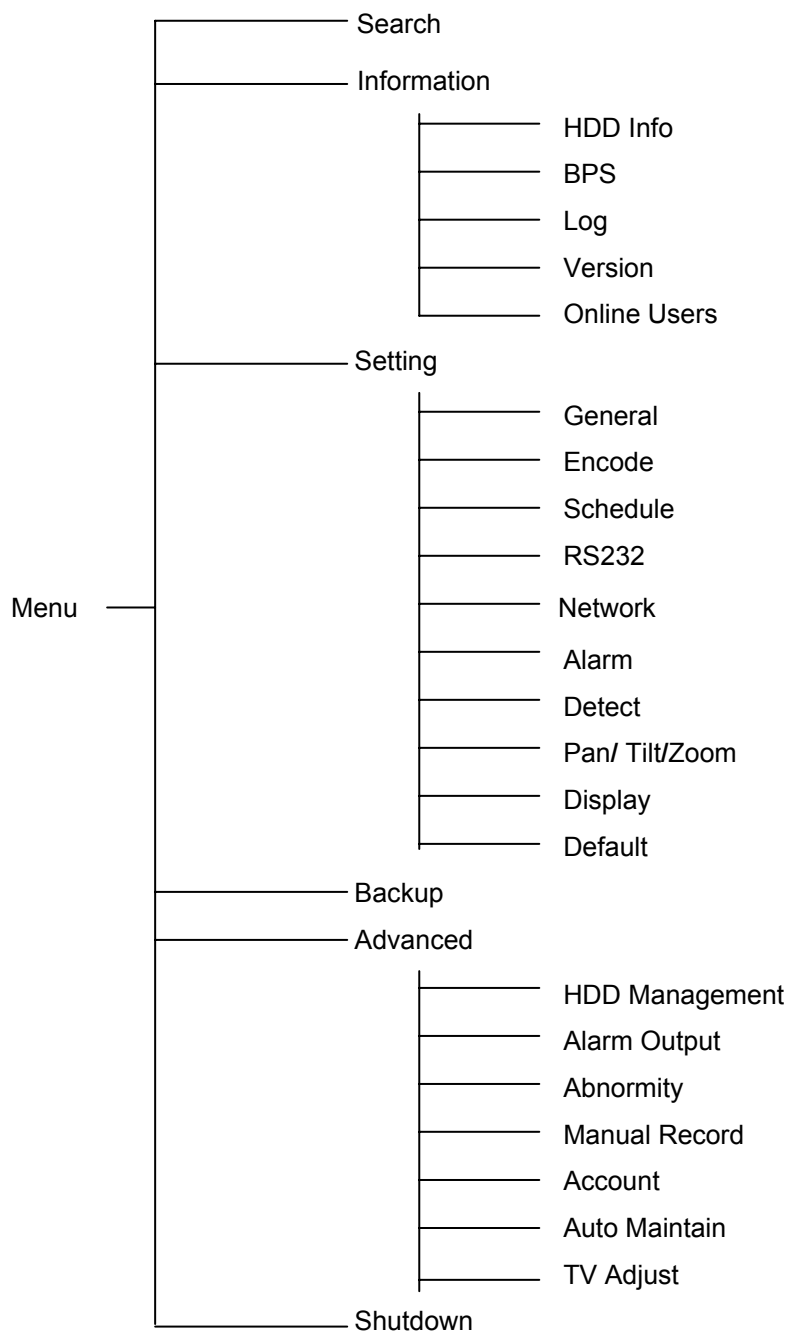
Correspondingly, the **Auto Scan** button changes to the **Stop** button. Click **Stop** to terminate the scan operation.

Click **Page Switch** again, and system goes back to *Figure 4-29*.

5 Understanding of Menu Operations and Controls

Menu Tree

This series DVR menu tree is shown as below.



Main Menu

After you logged in, the system main menu is shown as below. See [Figure 5-1](#). There are totally six buttons: **Search**, **Info**, **Setting**, **Backup**, **Advanced**, and **Shutdown**. Move the cursor to highlight the icon, then double-click to enter the sub-menu.

Figure 5-1 The Main Menu – Setting



Setting

In main menu, highlight setting icon and double click mouse. System setting interface is shown as below.

General

General setting includes the following items. See [Figure 5-2](#).

- System time: Here is for you to set system time
- Date format: There are three types: YYYY-MM-DD: MM-DD-YYYY or DD-MM-YYYY.
- Date separator: There are three denotations to separate date: dot, beeline and solidus.
- DST: Here you can set DST time and date. Please enable DST function and then click set button. You can see an interface is shown as in [Figure 5-2](#). Here you can set start time and end time by setting corresponding week setup. In [Figure 5-3](#), enable date button, you can see an interface is shown as in [Figure 5-4](#). Here you can set start time and end time by setting corresponding date setup.
- Time format: There are two types: 24-hour mode or 12-hour mode.
- Language: System supports various languages: Chinese (simplified), Chinese (Traditional), English, Italian, Japanese, French, Spanish (All languages listed here are optional. Slight difference maybe found in various series.)
- HDD full: Here is for you to select working mode when hard disk is full. There are two options: Stop recording or Overwrite.

- Pack duration: Here is for you to specify maximum length of each record file from 1 to 120 minutes. Default value is 60 minutes. The change will take effect in the new record file.
- DVR No: When you are using one remote control to control several DVRs, you can give a name to each DVR for your management.
- Video standard: There are two formats: NTSC and PAL.
- Auto logout: Here is for you to set auto logout interval once login user remains inactive for a specified time. Value ranges from 0 to 60 minutes.

Note

- Since system time is very important, do not modify time casually unless there is a must!
- Before your time modification, please stop record operation first!

After completing all the setups click **Save**, and system goes back to the previous menu.

Figure 5-2 General Setup Menu

Honeywell

GENERAL

System Time: 2009 - 09 - 07 | 10 : 29 : 37 [Save]

Date Format: YYYY MM DD [DST] [Set]

Date Separator: - [I]

Time Format: 24-HOUR [I]

Language: ENGLISH [I]

HDD Full: Overwrite [I]

Pack Duration: 60 min.

DVR No.: 8

Video Standard: PAL [I]

Auto Logout: 10 min.

[Default] [Save] [Cancel]

Figure 5-3 DST Setup Menu (Week)

DST

☒ Day of Week ☐ Date

Start: Jan [I] Last [I] Sun [I] 00 : 00

End: Jan [I] Last [I] Sun [I] 00 : 00

[OK] [Cancel]

Figure 5-4 DST setup menu (Date)

DST

☐ Day of Week ☒ Date

Start: 2000 - 01 - 01 | 00 : 00

End: 2009 - 01 - 01 | 00 : 00

[OK] [Cancel]

Encode

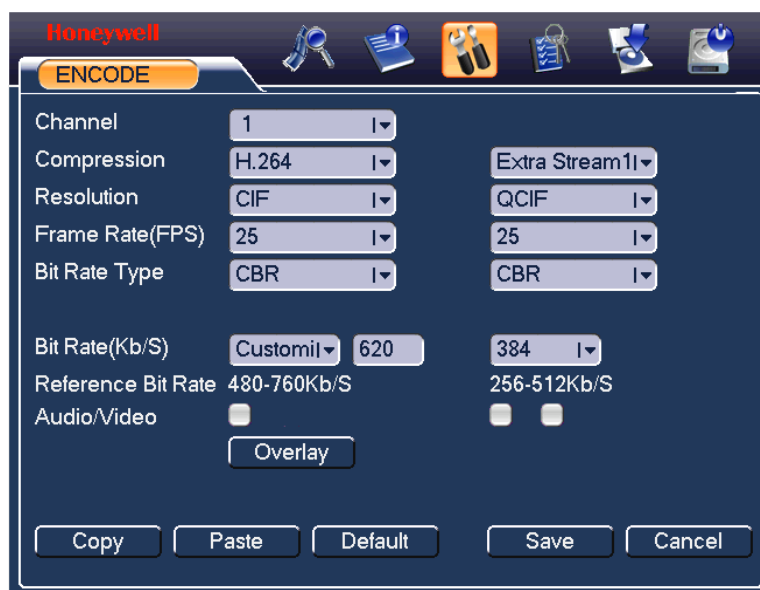
Encode setting includes the following items. See *Figure 5-5*.

Note that some series do not support extra stream.

- Channel: Select the channel you want.
- Compression: System supports H.264.
- Resolution: System supports various resolutions, you can select from the dropdown list. For this model, we can support D1/CIF/QCIF.
- Bit rate: System supports two types: CBR and VBR. Video quality is better under higher bit rate. In CBR mode, bit rate is limited by the setting value. In VBR mode, video quality level can be set.
- Quality: There are six levels ranging from 1 to 6. The sixth level has the highest image quality.
- Frame rate: there are six levels: 1 f/s, 2f/s, 3f/s, 6f/s, 12f/s, 25f/s.
- Video/audio: You can enable or disable the video/audio.
- Overlay: Click **Overlay**, and you can see an interface shown in *Figure 5-6*.
 - Cover area (Privacy mask): Here is for you to set privacy mask section. You can drag you mouse to set proper section size. In one channel video, system supports maximum 4 zones.
 - Preview/monitor: privacy mask has two types. Preview and Monitor. Preview means the privacy mask zone can not be viewed by user when system is in preview (live view) mode. Monitor means the privacy mask zone can not be viewed by the user in record playback or network remote monitoring.
 - Time display: You can select system displays time or not when you playback. Please click set button and then drag the title to the corresponding position in the screen.
 - Channel display: You can select system displays channel number or not when you playback. Click **Set** and then drag the title to the corresponding position on the screen.

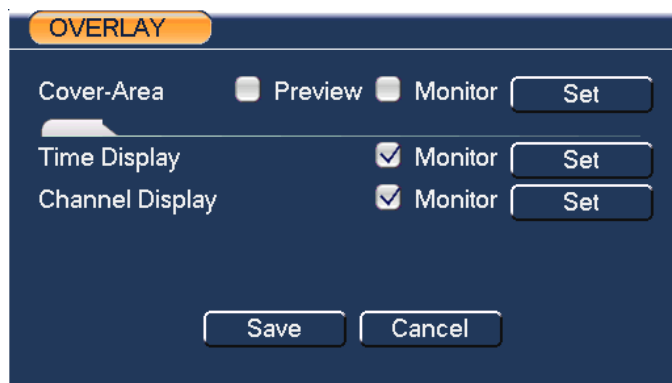
Please highlight icon  to select the corresponding function.

Figure 5-5 Encode Menu



The screenshot shows the Honeywell Encode Menu. At the top, there is a toolbar with icons for search, help, settings, and other functions. The menu is titled 'ENCODE' in a yellow button. Below the title, there are several settings: Channel (1), Compression (H.264), Resolution (CIF), Frame Rate (FPS) (25), Bit Rate Type (CBR), Bit Rate (Kb/S) (Custom, 620), Reference Bit Rate (480-760Kb/S), Audio/Video (checkbox), and Extra Stream 1 (dropdown). There are also buttons for Copy, Paste, Default, Save, and Cancel.

Figure 5-6 Overlay Menu



The screenshot shows the Honeywell Overlay Menu. At the top, there is a toolbar with icons for search, help, settings, and other functions. The menu is titled 'OVERLAY' in a yellow button. Below the title, there are several settings: Cover-Area (checkbox), Preview (checkbox), Monitor (checkbox), Time Display (checkbox), Channel Display (checkbox), and buttons for Set, Save, and Cancel.

Schedule

Refer to *Schedule* on page 25.

RS232

RS232 interface is shown as follows. There are five items. See *Figure 5-7*.

- Function: There are two modes for you to select. Console is for serial port or min-end platform to upgrade program. Adaptor is reserved for system integration or function enhancement.
- Baud rate: You can select proper baud rate.
- Data bit: You can select proper data bit.
- Stop bit: There are three values: 1/1.5/2.
- Parity: there are three choices: none/odd/even.

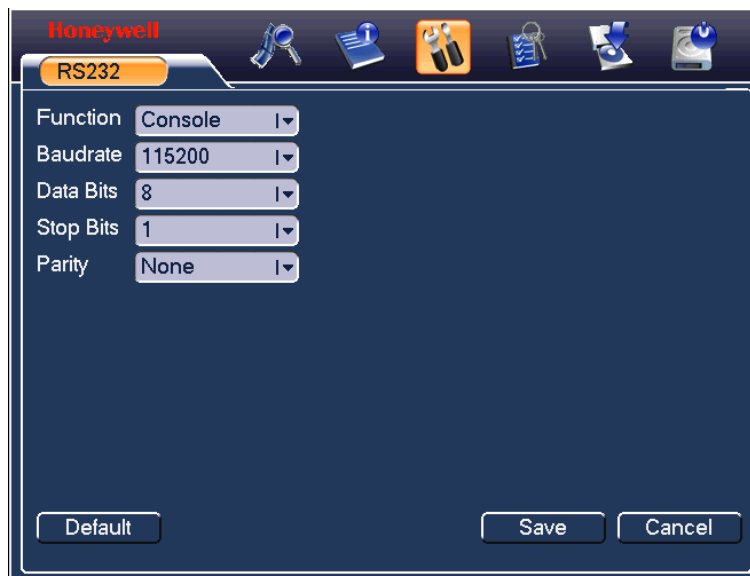
System default setup is:

- Function: Console
- Baud rate: 115200

- Data bit:8
- Stop bit:1
- Parity: None

After completing all the settings, click **Save**, and the system goes back to the previous menu.

Figure 5-7 The RS232 Setup Menu



Network

Here is for you to input network information. See *Figure 5-8*.

- IP address: Here you can input IP address.
- DHCP: It is to auto search IP. When enable DHCP function, you can not modify IP/Subnet mask /Gateway. These values are from DHCP function. If you have not enabled DHCP function, IP/Subnet mask/Gateway display as zero. You need to disable DHCP function to view current IP information. Besides, when PPPoE is operating, you can not modify IP/Subnet mask /Gateway.
- TCP port: Default value is 37777.
- UDP port: Default value is 37778.
- HTTP port: Default value is 80.
- Max connection: system support maximal 10 users. 0 means there is no connection limit.
- Transfer mode: Here you can select the priority between fluency/video qualities.
- Network download: System can process the downloaded data first if you enable this function.

After completing all the settings, click **Save**, and the system goes back to the previous menu.

Figure 5-8 Network Setup Menu

Honeywell

NETWORK

IP Address: 192 . 168 . 1 . 108 ☐ DHCP

Subnet Mask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 1 . 1

TCP Port: 37777 HTTP Port: 80

UDP Port: 37778 Max Connection: 10

☐ Transfer Mode: Fluency |

☐ LAN Download

ADVANCED SETTING

☐ IP FILTER	Trusted Sites:0
☐ NTP	NTPServer : 10
☐ PPPOE	
☐ DDNS	No Available DDNS Setup

Default Save Cancel

Advanced Setup

Advanced setup interface is shown as in *Figure 5-9*. Draw a circle to enable the corresponding function and then double-click the current item to go to the setup interface.

Figure 5-9 Advanced Settings

ADVANCED SETTING

☐ IP FILTER	Trusted Sites:0
☐ NTP	NTPServer : 10
☐ PPPOE	
☐ DDNS	No Available DDNS Setup

IP Filter

IP filter interface is shown as in *Figure 5-10*. You can add IP in the following list. The list supports max 64 IP addresses.

Note that after you enabled this function, only the IP listed below can access current DVR.

If you disable this function, all IP addresses can access the current DVR.

Figure 5-10 IP Filter Menu

PPPoE

PPPoE interface is shown in *Figure 5-11*.

Input “PPPoE name” and “PPPoE password” you get from your ISP (Internet service provider).

Click **Save**, you need to restart to activate your configuration.

After rebooting, DVR will connect to internet automatically. The IP in the PPPoE is the DVR dynamic value. You can access this IP to visit the unit.

Figure 5-11 The PPPoE Setup Menu

NTP Setup

You need to install SNTP server (Such as Absolute Time Server) in your PC first. In Windows XP OS, you can use command “net start w32time” to boot up NTP service.

NTP setup interface is shown as in *Figure 5-12*.

- Host IP: Input your PC address.
- Port: This series DVR supports TCP transmission only. Port default value is 123.
- Update interval: minimum value is 1. Max value is 65535. (Unit: minute)
- Time zone: select your corresponding time zone here.

Here is a sheet for your time zone setup.

City/Region Name	Time Zone
London	GMT+0
Berlin	GMT+1
Cairo	GMT+2
Moscow	GMT+3
New Deli	GMT+5
Bangkok	GMT+7
Beijing (Hong Kong)	GMT+8
Tokyo	GMT+9
Sydney	GMT+10
Hawaii	GMT-10
Alaska	GMT-9
Pacific Time(P.T)	GMT-8
American Mountain Time(M.T)	GMT-7
American Central Time(C.T)	GMT-6
American Eastern Time(E.T)	GMT-5
Atlantic Time	GMT-4
Brazil	GMT-3
Middle Atlantic Time	GMT-2

Figure 5-12 The NTP Setup Menu

DDNS Setup

DDNS setup interface is shown as in *Figure 5-13*.

You need a PC of fixed IP in the internet and there is the DDNS software running in this PC. In other words, this PC is a DNS (domain name server).

In network DDNS, please select DDNS type and highlight enable item. Then please input your domain name, user name and password you get from you ISP and server IP (PC with DDNS) . Click Save button and then reboot system.

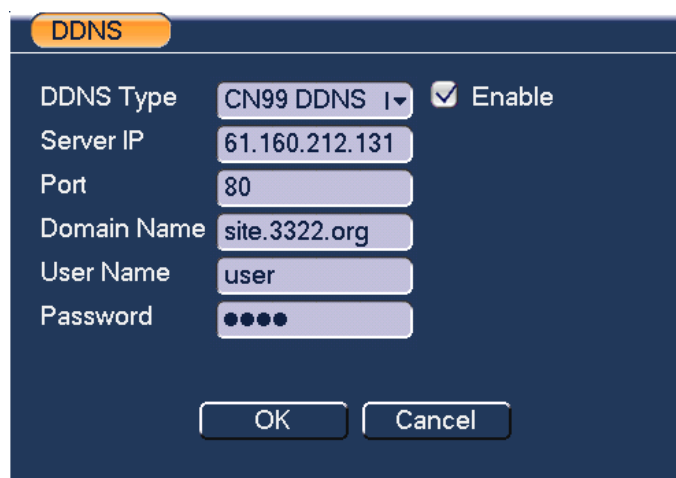
After rebooting, open IE and input as below:

http: //(Domain Name)

e.g.: http://site.3322.org)

Now you can open DDNSServer web search page.

Figure 5-13 The DDNS Setup Menu



The DDNS Setup Menu dialog box has a title bar with a tab labeled "DDNS". It contains the following fields and controls:

- DDNS Type:** A dropdown menu set to "CN99 DDNS".
- Enable:** A checked checkbox.
- Server IP:** A text box containing "61.160.212.131".
- Port:** A text box containing "80".
- Domain Name:** A text box containing "site.3322.org".
- User Name:** A text box containing "user".
- Password:** A text box with four dots representing a masked password.
- Buttons:** "OK" and "Cancel" buttons at the bottom.

Note that the NNDS type includes: CN99 DDNS、NO-IP DDNS、Private DDNS、Dyndns DDNS and sysdns DDNS.

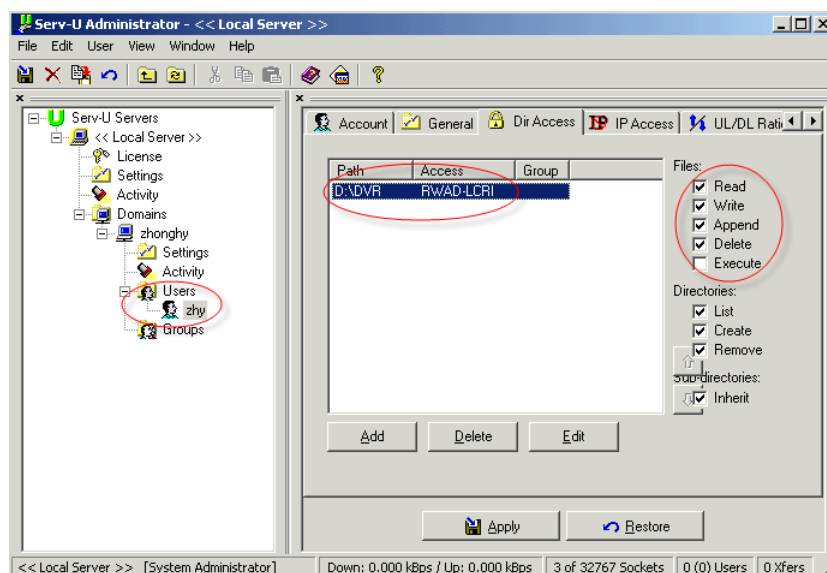
Private DDNS function is reserved for integration, and currently is not effective on HSVR-16

FTP

You need to download or buy FTP service tool (such as Ser-U FTP SERVER) to establish FTP service.

Install Ser-U FTP SERVER first from **Start→Program→Serv-U FTP Server→Serv-U Administrator**. Now you can set the user password and FTP folder. Please note that you need to grant write right to FTP upload user. See *Figure 5-14*.

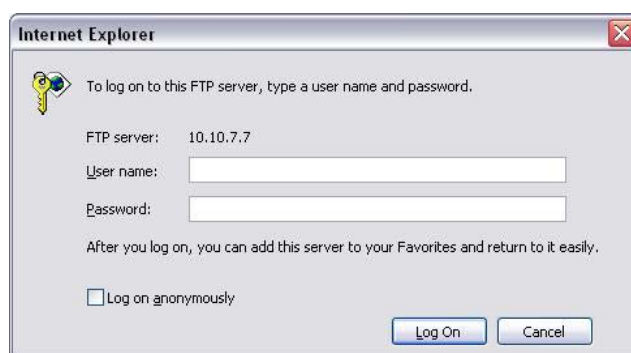
Figure 5-14 The FTP Server Setup Menu



You can use a PC or FTP login tool to test setup is right or not.

For example, you can login user ZHY to [FTP://10.10.7.7](ftp://10.10.7.7) and then test it can modify or delete folder or not. See *Figure 5-15*.

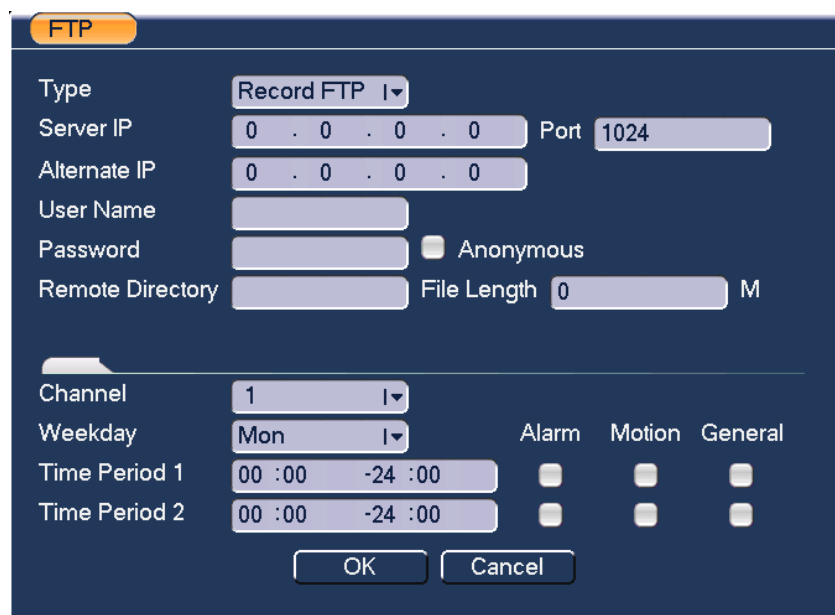
Figure 5-15 The FTP Login Window



System also supports upload multiple DVRs to one FTP server. You can create multiple folders under this FTP.

In [Figure 5-8](#), select FTP and then double-click mouse. You can see the following interface. See [Figure 5-16](#).

Figure 5-16 The FTP Setup Menu



Please highlight the icon  in front of Enable to activate FTP function.

Here you can input FTP server address, port and remote directory. When remote directory is null, system automatically create folders according to the IP, time and channel.

User name and password is the account information for you to login the FTP.

File length is upload file length. When setup is larger than the actual file length, system will upload the whole file. When setup here is smaller than the actual file length, system only uploads the set length and auto ignore the left section. When interval value is 0, system uploads all corresponding files.

After channel and weekday setup, you can set two periods for one each channel.

Email

The following figure shows the email interface.

Figure 5-17 The Email Setup Menu

The screenshot shows a dark blue dialog box titled "EMAIL" in an orange tab. It contains the following fields and values:

Field	Value
SMTP Server	220.181.12.11
Port	25
User Name	user
Password	••••••••
Sender	user@163.com
Title	DVR ALERT
Receiver	receiver@163.c

At the bottom are two buttons: "OK" and "Cancel".

Refer to the following table for detailed information.

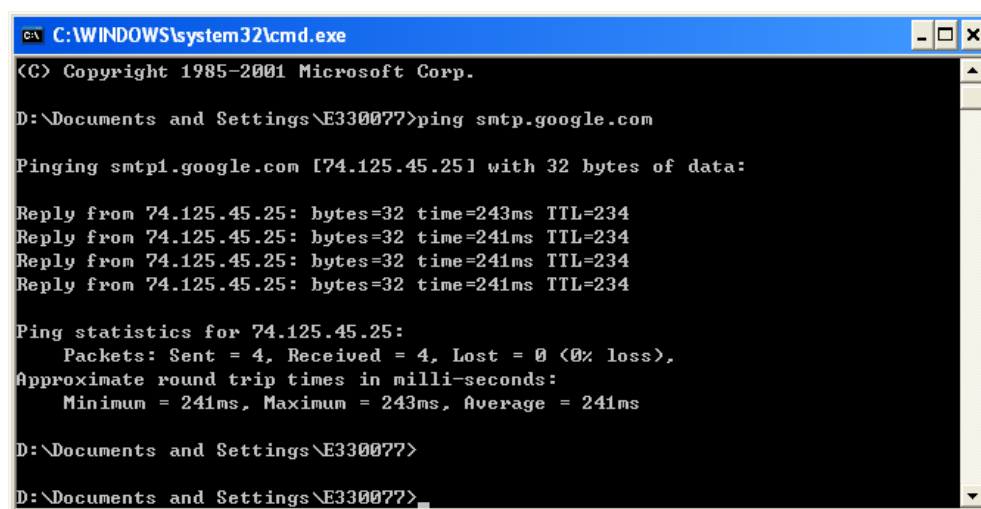
Parameter	Function
SMTP Server	Input server address and then enable this function.
Port	Default value is 25. You can modify it if necessary.
User Name	The sender email account user name.
Password	The sender email account password.
Sender	Sender email address.
Subject	Input email subject here.
Address	Input receiver email address here. Max input three addresses.

The SMTP server IP address can be got by Ping command under Windows Command Prompt.

Take Google Mail for example: the Gmail SMTP server URL is known as smtp.google.com.

- On a PC of Windows OS in the same LAN of HSVR-16, open the Windows Command Prompt by entering "cmd" in **Start→Run** and click **OK**.
- Under Windows Command Prompt, input *ping smtp.google.com* then return.
- The displayed IP address 74.125.45.25 is the SMTP server IP address.

Figure 5-18 The Command Window



```
C:\WINDOWS\system32\cmd.exe
(C) Copyright 1985-2001 Microsoft Corp.

D:\Documents and Settings\E330077>ping smtp.google.com

Pinging smtp1.google.com [74.125.45.25] with 32 bytes of data:

Reply from 74.125.45.25: bytes=32 time=243ms TTL=234
Reply from 74.125.45.25: bytes=32 time=241ms TTL=234
Reply from 74.125.45.25: bytes=32 time=241ms TTL=234
Reply from 74.125.45.25: bytes=32 time=241ms TTL=234

Ping statistics for 74.125.45.25:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 241ms, Maximum = 243ms, Average = 241ms

D:\Documents and Settings\E330077>
D:\Documents and Settings\E330077>
```

Alarm

Refer to *Alarm Setup and Alarm Activation* on page 30.

Detect

Refer to *Detect* on page 26.

Pan/Tilt/Zoom

The pan/tilt/zoom setup includes the following items. Please select channel first. See *Figure 5-19*.

- Protocol: Select corresponding PTZ protocol such as PELCOD.
- Address: input corresponding PTZ address.
- Baud rate: Select baud rate.
- Data bit: Select data bit.
- Stop bit: Select stop bit.
- Parity: There are three choices: none/odd/even.

After completing all the setups click **Save**, and the system goes back to the previous menu.

For detailed setup, refer to *Preset/Tour/Pattern/Scan Operations* on page 37.

Figure 5-19 The PTZ Setup Menu

Honeywell

PAN/TILT/ZOOM

Channel 1

Protocol PELCOD

Address 1

Baudrate 9600

Data Bits 8

Stop Bits 1

Parity None

Copy Paste Default Save Cancel

Display

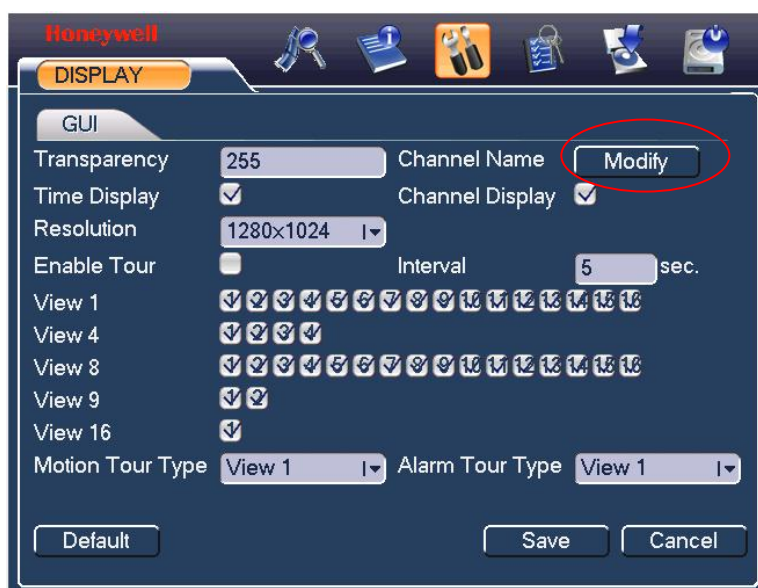
Display setup interface is shown as below. See [Figure 5-20](#).

- Transparency: Here is for you to adjust transparency. The value ranges from 128 to 255.
- Channel name: Here is for you to modify channel name. System max support 25-digit (The value may vary due to different series). Please note all your modification here only applies to DVR local end. You need to open web or client end to refresh channel name.
- Time display: You can select to display time or not when system is playback.
- Channel display: You can select to channel name or not when system is playback.
- Overlay information: System displays some information in the screen for your reference.
- Display mode: you can select from the dropdown list: self-adaptive/VGA/TV.
- Enable tour: activate tour function.
- Interval: Input proper interval value here. The value ranges from 5-120 seconds. In tour process, you can use mouse or click **Shift** to turn on window switch function.  Stands for opening switch function,  stands for closing switch function.
- Motion tour type: System support 1/8 window tour.
- Alarm tour type: System support 1/4/9/16 window tour.

Please highlight icon  to select the corresponding function.

After completing all the setups click **Save**, and the system goes back to the previous menu.

Figure 5-20 The Display Setup Menu



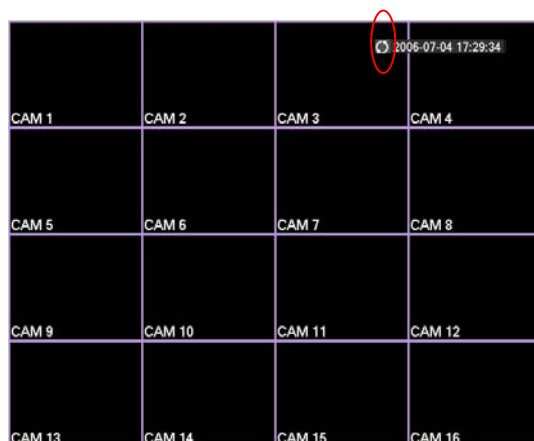
In *Figure 5-20*, click **Modify** after channel. You can see an interface shown in *Figure 5-21*. Note that all your modification here applies to local end only. You need to refresh web or client-end to get the latest channel name. System max support 25-digital character.

Figure 5-21 The Channel Name Setup Menu



In tour mode, you can see the following interface. On the right corner, right-click mouse or click **Shift**, and you can control the tour. There are two buttons:  stands for enabling window switch and  stands for enabling window function. See *Figure 5-22*.

Figure 5-22 The Sample of Tour Mode



Default

Click **Default**, the system pops up a dialogue box. You can highlight  to restore default factory setup. See [Figure 5-23](#).

- Select all
- General
- Encode
- Schedule
- RS232
- Network
- Alarm
- Detect
- Pan/tilt/zoom
- Display
- Channel name

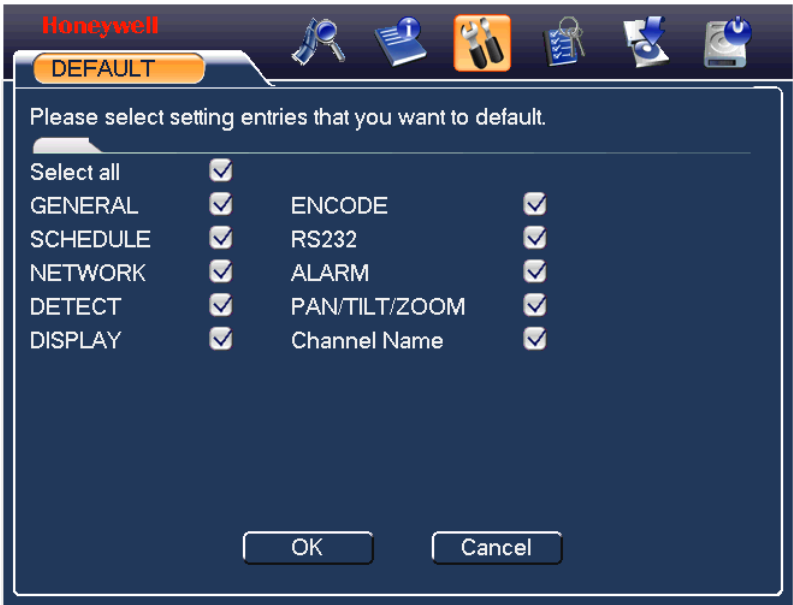
Please highlight icon  to select the corresponding function.

After all the setups please click save button, system goes back to the previous menu.

Warning!

System menu color, language, time display mode, video format, IP address, user account will not maintain previous setup after default operation!

Figure 5-23 The Default Setup Menu



Search

Refer to *Search & Playback* on page 22.

Advanced

Double-click **Advanced** on the main window, and the interface is shown as follows. See *Figure 5-24*. There are totally seven function keys: HDD management, alarm output, abnormality, manual record, account, auto maintenance, and TV adjust.

Figure 5-24 The Advanced Menu



HDD Management

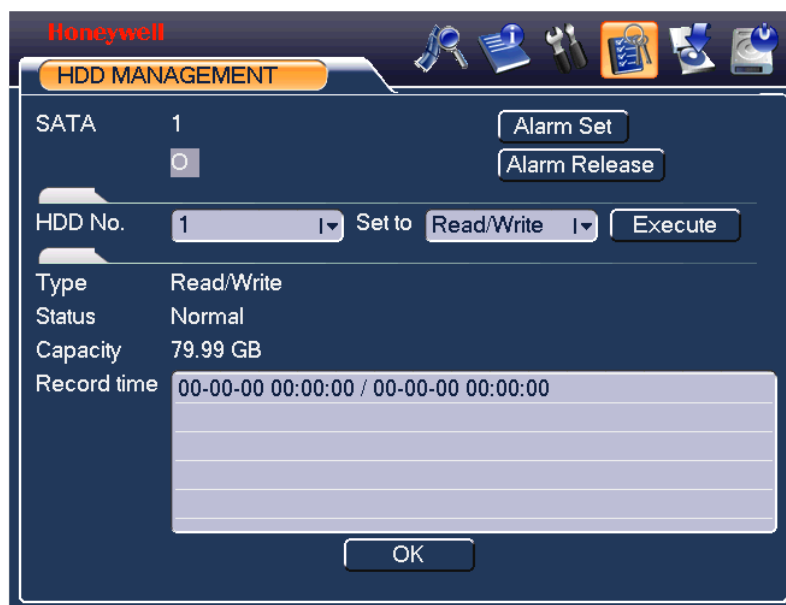
Here is for you to view and implement hard disk management. See [Figure 5-25](#).

You can see current HDD type, status, capacity and record time.

You can select HDD mode from the dropdown list such as read-only or you can erase all data in the HDD.

Please note that the system needs to reboot to get all the modification activated.

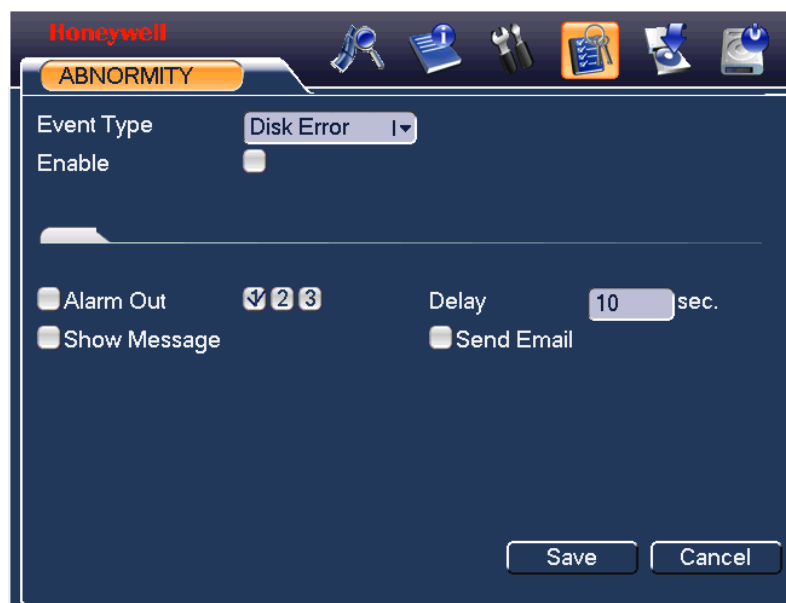
Figure 5-25 The HDD Management Setup Menu



Click **Alarm Set**, and the interface is shown as follows. See [Figure 5-26](#)(this interface is just like the abnormality setup). Refer to chapter 5.5.2 for detailed information.

Please highlight icon  to select the corresponding function.

Figure 5-26 The Abnormity Setup Menu

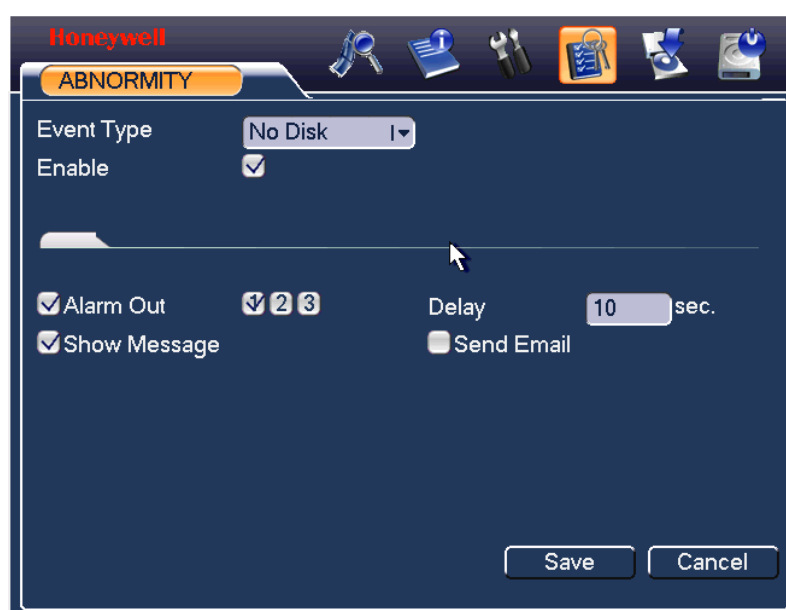


Abnormity

Abnormity interface is shown as in *Figure 5-27*.

- Event type: There are several options for you such as disk error, no disk and etc.
- Alarm output: alarm activation output port (multiple choices). The 3-ch is controllable 12V output.
- Delay: here you can set corresponding delaying time. The value ranges from 10s-300s. System automatically delays specified seconds in turning off alarm and activated output after external alarm cancelled.
- Show message: system can pop up the message in the local screen to alert you when alarm occurs.
- Send email: System can send out email to alert you when alarm occurs.

Figure 5-27 The Sample of No Disk Abnormity



Alarm Output

Here is for you to set proper alarm output.

Please highlight icon  to select the corresponding alarm output.

After all the setups please click **OK**, and the system goes back to the previous menu. See *Figure 5-28*.

Figure 5-28 The Alarm Output Setup Menu

Alarm Type	All	1	2	3
Automatic	☐	☒	☒	☒
Manual	☐	☐	☐	☐
Closed	☐	☐	☐	☐
Status		☐	☐	☐

OK Cancel

Manual Record

Refer to *Manual Record* on page 20.

Account

Here is for you to implement account management. See *Figure 5-29*. Here you can:

- Add new user
- Modify user
- Add group
- Modify group
- Modify password.

For account management please note:

- System account adopts two-level management: group and user. No limit to group or user amount.
- For group or user management, there are two levels: admin and user.
- The user name and group name can consist of eight characters of letters, numbers and/or 3 symbols ("_", "-", "."). SPACE is not recommended, and SPACE at the start or end of user name will be ignored. One name can only be used once.
- There are four default users: admin/888888/666666 and hidden user "default". User 888888 and admin have administrator right.
- Hidden user "default" is for system interior use only and can not be deleted. When there is no login user, hidden user "default" automatically login. You can set some rights such as monitor for this user so that you can view some channel view without login.
- One user should belong to one group. User right can not exceed group right.
- About reusable function: this function allows multiple users use the same account to login.

After all the setups please click **Save**, and the system goes back to the previous menu.

Figure 5-29 The Account Management Menu

	User	Group	Status
1	888888	admin	Login Local
2	666666	user	Normal
3	admin	admin	Normal
4	default	user	Default User

Buttons: Add User, Modify User, Add Group, Modify Group, Modify Password

Auto Maintain

Here you can set auto-reboot time and auto-delete old files setup. See [Figure 5-30](#).

You can select proper setup from dropdown list.

After all the setups please **Save**, and the system goes back to the previous menu.

Figure 5-30 The Auto Maintain Setup Menu

Auto-Reboot System

Every Tuesday at 02:00

Auto-Delete Old Files

Never

Buttons: OK, Cancel

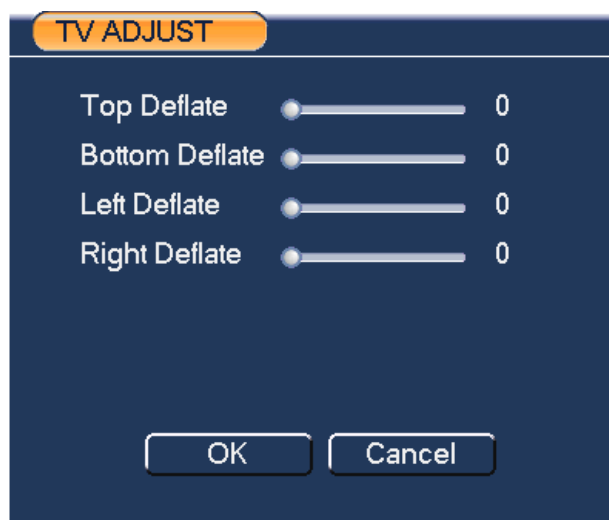
TV Adjust

Here is for you to adjust TV output setup. See [Figure 5-31](#).

Please drag slide bar to adjust each item.

After all the setups please click OK button, system goes back to the previous menu.

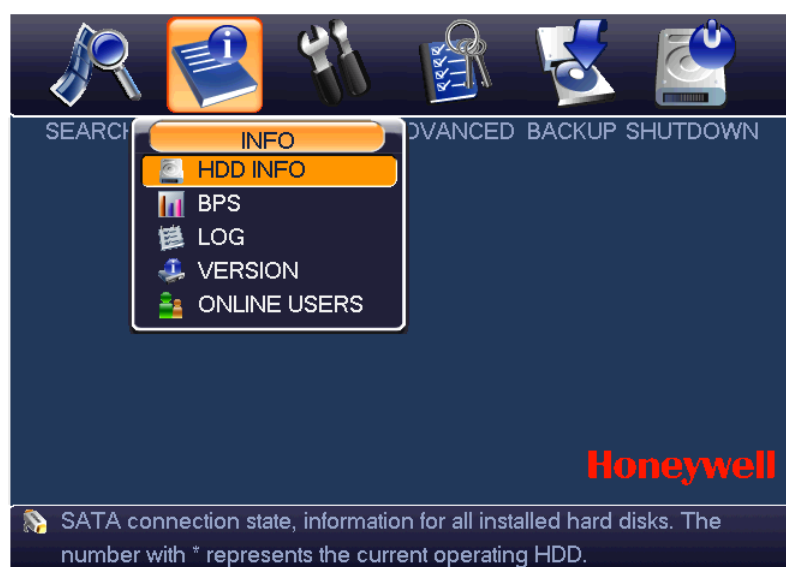
Figure 5-31 The TV Adjust Menu



Information

Here is for you to view system information. There are total five items: HDD (hard disk information), BPS (data stream statistics), Log and version, and online user. See [Figure 5-32](#).

Figure 5-32 The Info Menu



HDD Information

Here is to list hard disk type, total space, free space, video start time and status. See [Figure 5-33](#).

○ means current HDD is normal. X means there is error. - means there is no HDD.

If disk is damaged, system shows as "?". Please remove the broken hard disk before you add a new one.

Once there is a hard disk confliction, please check hard disk time and system time is the same or not. Please go to setting then general to modify system time. At last, reboot the system to solve this problem.

After system booted up, if there is any confliction, system goes to HDD information interface directly. Please note, system does not ask you to deal with it forcedly.

When HDD confliction occurs, you can check system time and HDD time are identical or not. If they are not identical, please go to General (Chapter 5.3.1) to adjust system time or go to HDD Management (Chapter 5.5.1) to format HDD and then reboot the DVR.

Figure 5-33The HDD Info Menu



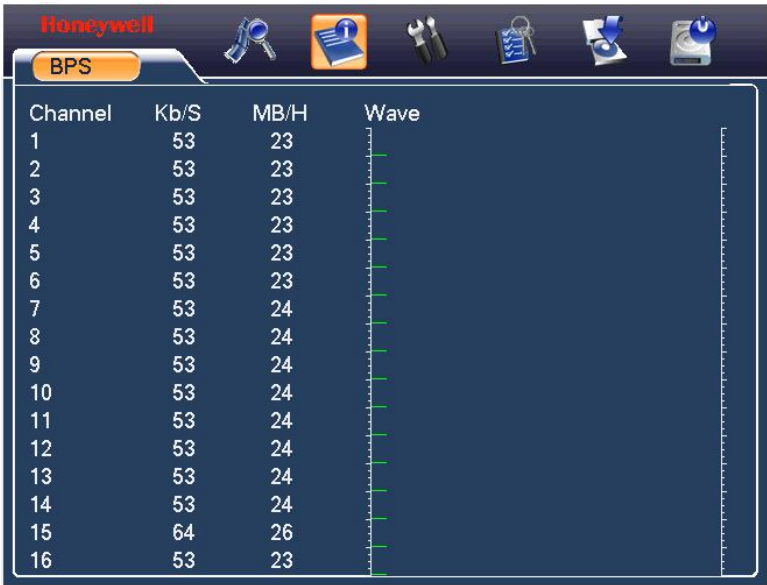
Tips:

Click **Fn** or left click mouse button to view the HDD record time and HDD type and time.

BPS

Here is for you to view current video data stream (KB/s) and occupied hard disk storage (MB/h). See [Figure 5-34](#).

Figure 5-34 The BPS Display Menu



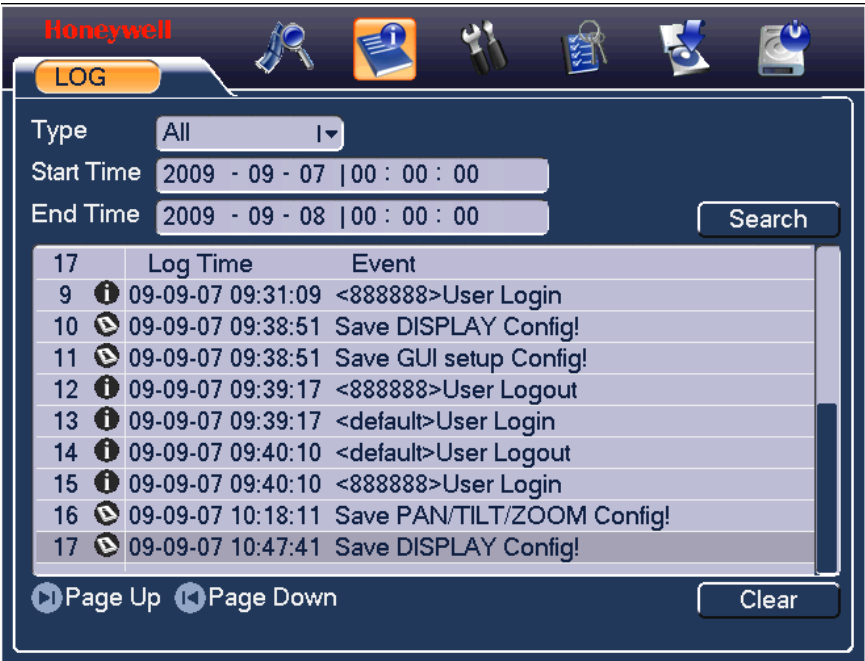
Log

Here is for you to view system log file. System lists the following information. See [Figure 5-35](#).

Log types include system operation, configuration operation, data management, alarm event, record operation, log clear and etc.

Select the start time and end time, and then click **Search**. You can view the log files. Click **Page Up** or **Page Down** to view if there are more than ten files.

Figure 5-35 The Log Search Menu

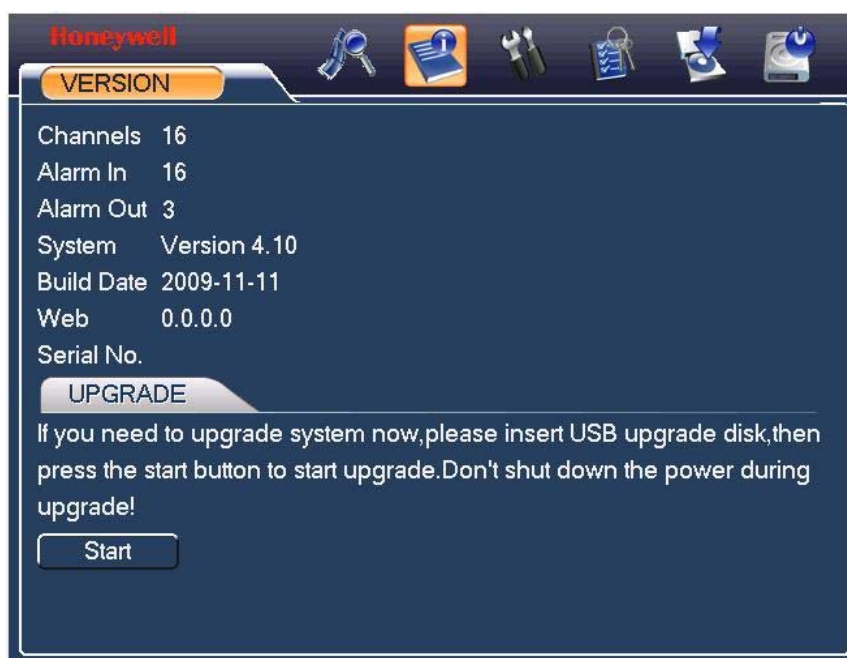


Version

Here is for you to view some version information. See *Figure 5-36*.

- Channel
- Alarm in
- Alarm out
- System version:
- Build Date

Figure 5-36 The Version Menu



Online Users

Here is for you manage online users. See *Figure 5-37*.

You can disconnect one user or block one user if you have proper system right. Max disconnection setup is 65535 seconds.

Figure 5-37 The Online Users Menu

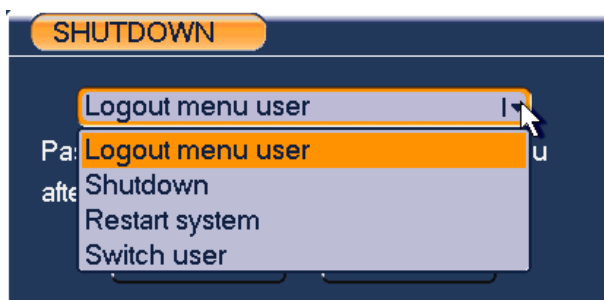


Shutdown

Double click shutdown button, system pops up a dialogue box for you to select.
See [Figure 5-38](#).

- Logout menu user: log out menu. You need to input password when you login the next time.
- Restart application: reboot DVR.
- Shutdown: system shuts down and turns off power.
- Restart system: system begins rebooting.
- Switch user: you can use another account to log in.

Figure 5-38 The Shutdown Menu



6 Web Client Operation

Note

- All the operations here are based on our 16-ch DVR.
 - There might be slightly difference in the interface due to different series.
-

Network Connection

Before the web client operation, please check the following items:

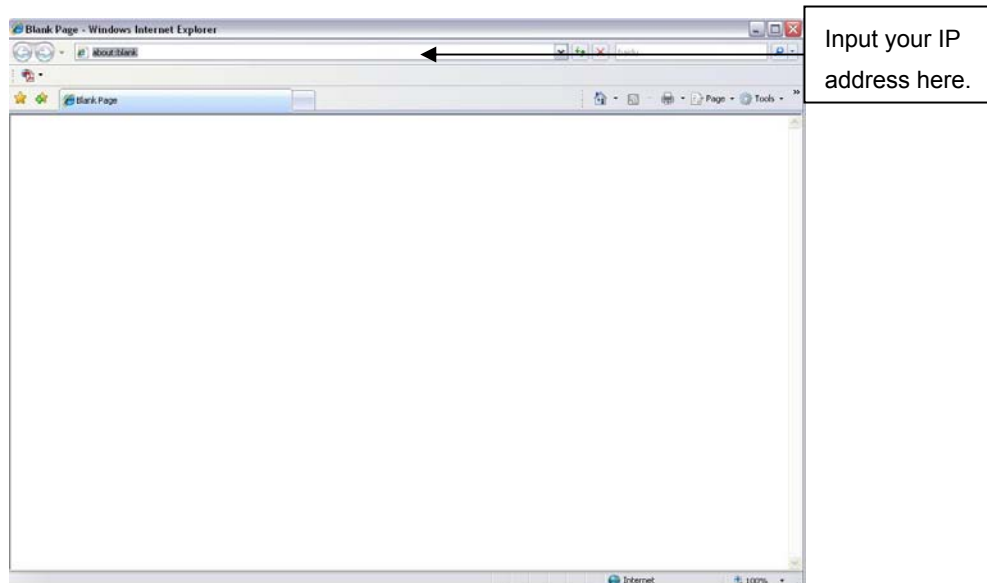
- Network connection is right
- DVR and PC network setup is right. Please refer to network setup(**main menu→setting→network**)
- Use order ping `***.***.***.***`(* DVR IP address) to check connection is OK or not. Usually the return TTL value should be less than 255.
- Open the IE and then input DVR IP address.
- System can automatically download latest web control and the new version can overwrite the previous one.
- If you want to un-install the web control, please run *uninstall webrec2.0.bat*. Or you can go to C:\Program Files\webrec to remove single folder. Please note, before you un-install, please close all web pages, otherwise the un-installation might result in error.

Login

Open IE and input DVR address in the address column. For example, if your DVR IP is 10.10.3.16, then please input `http:// 10.10.3.16` in IE address column. See

Figure 6-1

Figure 6-1 Sample of IE Login



System pops up warning information to ask you whether install webrec.cab control or not. Please click yes button.

If you can't download the ActiveX file, please modify your settings as follows. See [Figure 6-2](#) and [Figure 6-3](#).

Figure 6-2 The Internet Options Window

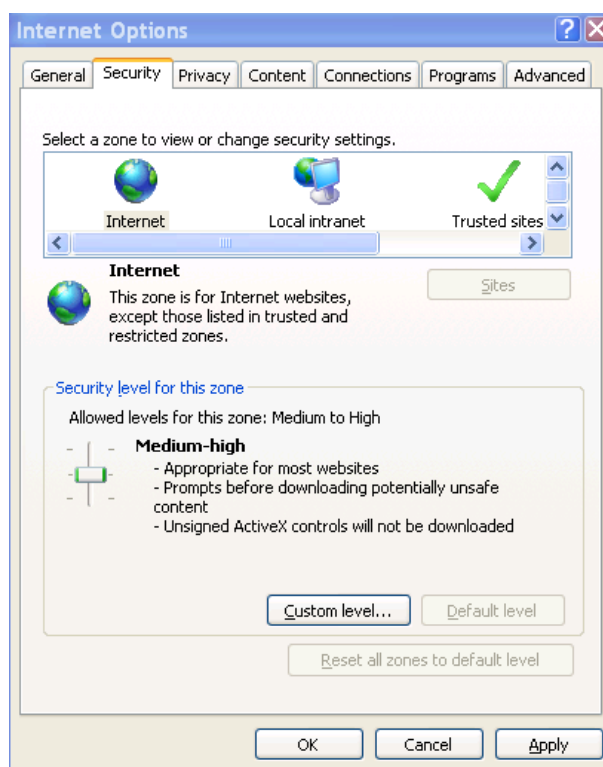
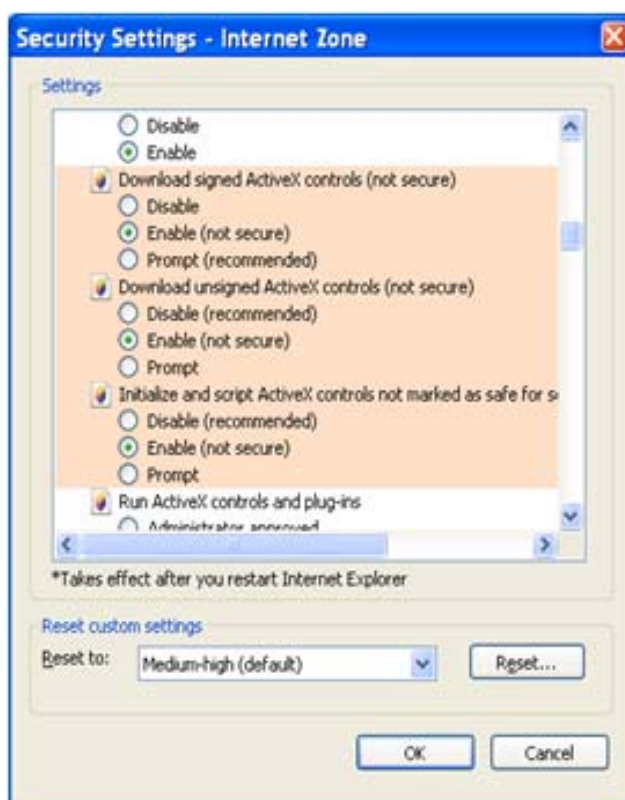


Figure 6-3 The Settings for ActiveX



After installation, the interface is shown as below. See [Figure 6-4](#).

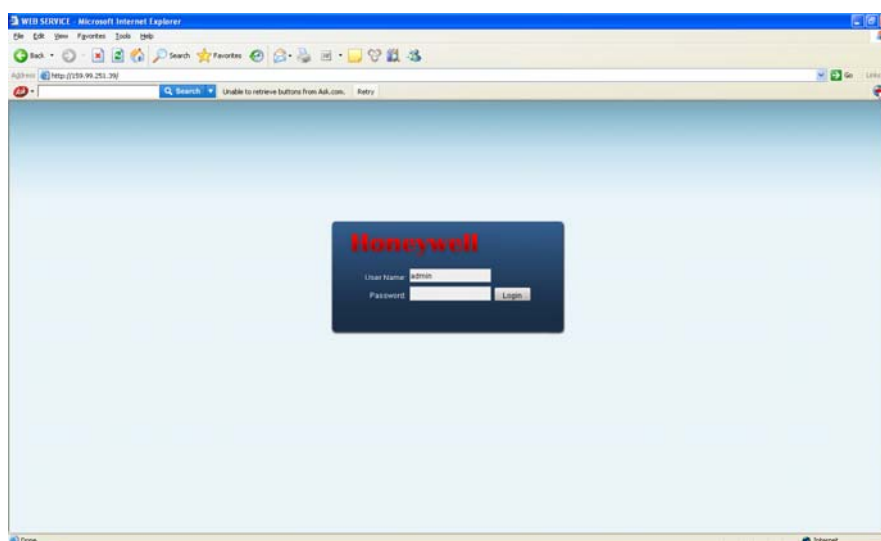
Please input your user name and password.

Default factory name is admin and password is admin.

Note

For security reasons, please modify your password after you first login.

Figure 6-4 The Web Login Window



After you logged in, you can see the main window. See [Figure 6-7](#).

This main window can be divided into the following sections.

- Section 1: there are five function buttons: configuration (chapter 7.3), search (chapter 7.4), alarm (chapter 7.5), about (chapter 7.6), log out (chapter 7.7).
- Section 2: there are channel number and three function buttons: start dialog and local play, refresh.
- Section 3: there are PTZ (chapter 7.2.2), color (chapter 7.2.3) button and you can also select picture path and record path.
- Section 4: real-time monitor window. Please note current preview window is circled by a green rectangle zone.
- Section 5: Here you can view window switch button. You can also select video priority between fluency or real-time.
 - System monitor window switch supports full screen/1-window/4-window/6-window/8-window/9-window/13-window/16-window/20-window/25-window/36-window. See *Figure 6-5*.

Figure 6-5 The Window Switch Menu

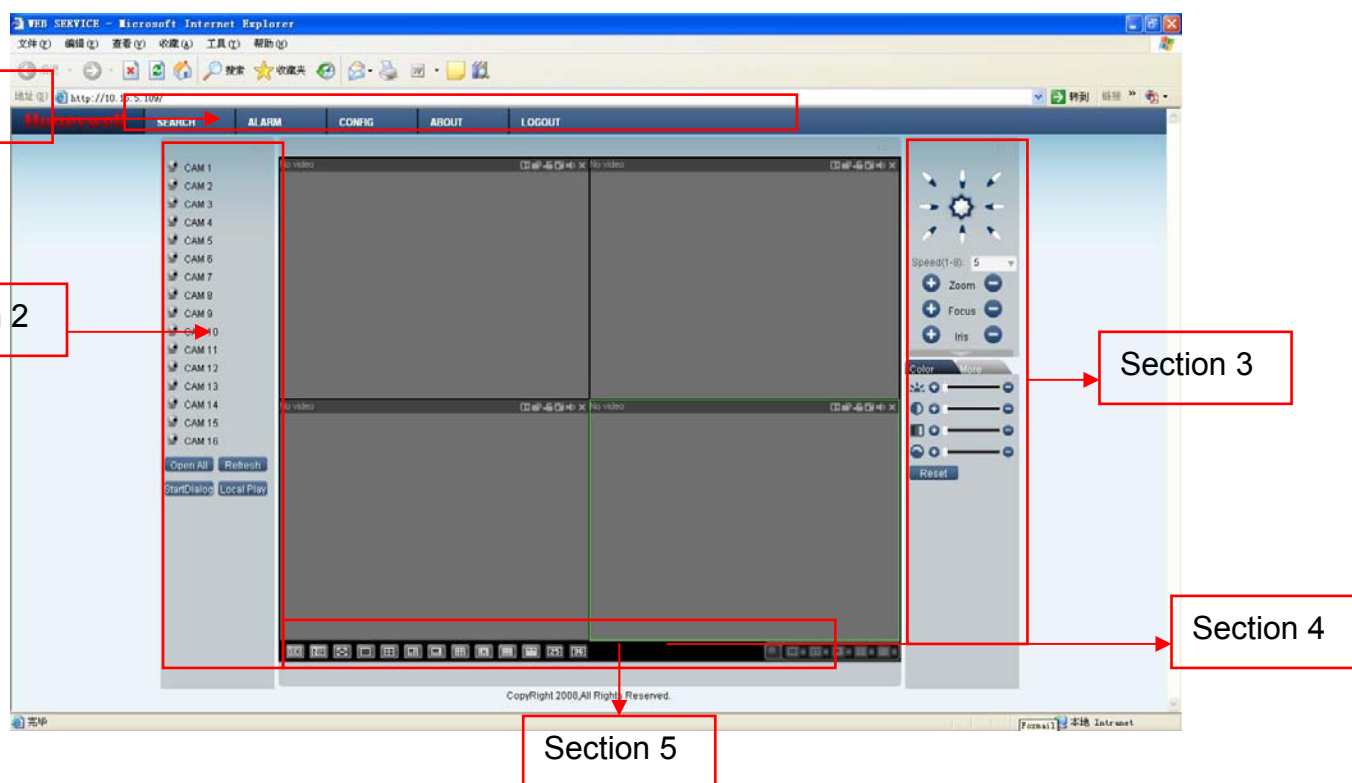


- Preview window switch. System support 1/4/8/9/16-window real-time preview. Please you need to have the proper rights to implement preview operation. You cannot preview if you have no right to preview the either channel. See *Figure 6-6*.

Figure 6-6 The Preview Window Switch Menu



Figure 6-7 The Main Menu of Web Client

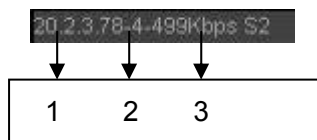


Real-Time Monitor

In section 2, left click the channel name you want to view, you can see the corresponding video in current window.

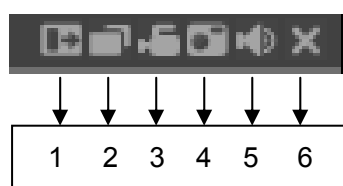
On the top left corner, you can view device IP, channel number, network monitor bit stream.

Figure 6-8 Status Information



On the top right corner, there are six function buttons. See [Figure 6-9](#).

Figure 6-9 Control Setup



- 1: Digital zoom: Click this button and then left drag the mouse in the zone to zoom in. right click mouse system restores original status.
- 2: Change show mode: resize or switch to full screen mode.
- 3: Local record. When you click local record button, the system begins recording and this button becomes highlighted. You can go to system folder RecordDownload to view the recorded file. Clicking the highlighted button will stop local recording, and the button will resume original status.
- 4: Capture picture. You can snapshot important video. All images are memorized in system client folder \download\picture (default).
- 5: Audio :Turn on or off audio.(It has no relationship with system audio setup)
- 6: Close video.

Please refer to [Figure 6-10](#) for the main stream and extra stream switch information.

Figure 6-10 Switch between the Main Stream and Extra Stream**Open All**

You can click it to open all channels.

Refresh

You can use button to refresh camera list.

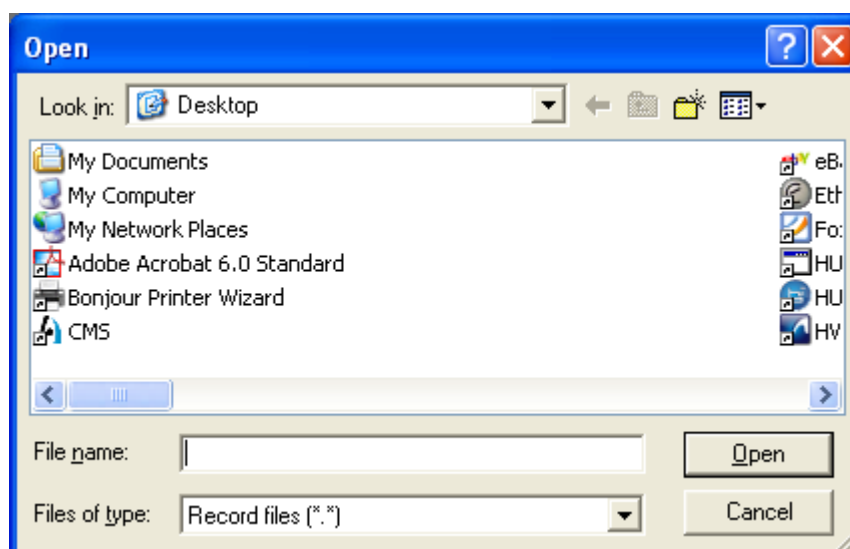
Start Dialogue

You can click this button to enable audio talk.

Local Play

Click **Local Play**, and the system pops up the following interface for you to select local play file. See [Figure 6-11](#).

Figure 6-11 Selection Menu of Local Play File

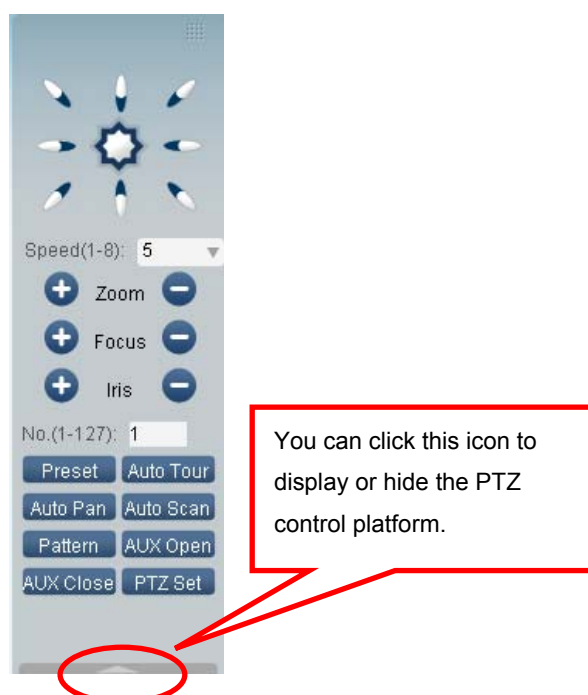


PTZ

Before PTZ operation, make sure you have properly set PTZ protocol. (Please refer to chapter 6.3.2 Setting-> Pan/Tilt/Zoom).

Click **PTZ**, and the interface is shown as in *Figure 6-12*.

Figure 6-12 PTZ Control Menu



Direction key and 3D positioning key

In *Figure 6-12*, there are eight direction keys.

In the middle of the eight direction keys, there is a 3D intelligent positioning key.

Click the 3D intelligent positioning key, system goes back to the single screen mode. Drag the mouse in the screen to adjust section size. It can realize PTZ automatically.

Speed

System supports eight-level speed. You can select from the dropdown list. Speed 2 is faster than speed 1.

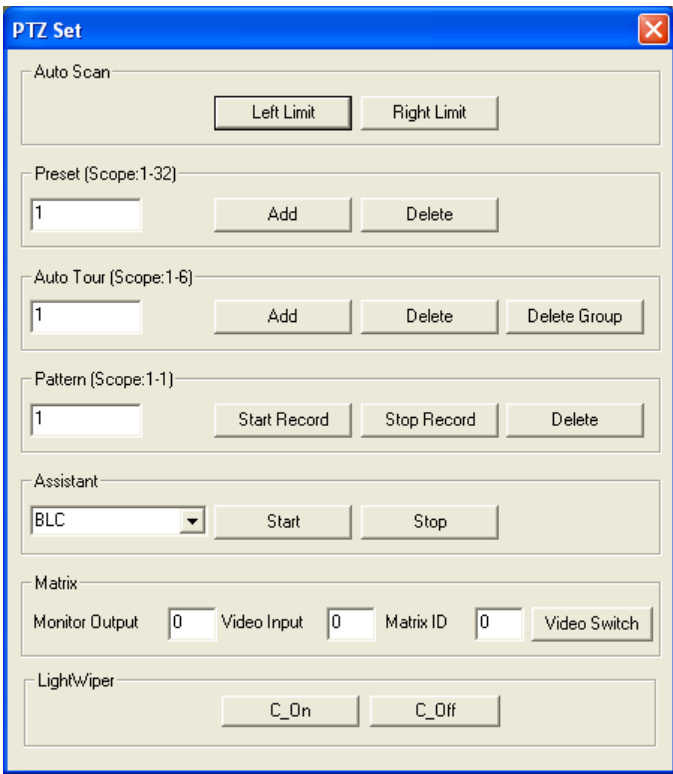
Zoom/Focus/Iris

Here is a sheet for you reference.

Name	Function key	Function	Function key	Function
Zoom		Near		Far
Focus		Near		Far
Iris		close		Open

In [Figure 6-12](#), click PTZ setup button you can see the following interface. See [Figure 6-13](#).

Figure 6-13 The PTZ Setup Menu



The PTZ Set configuration window contains several sections for setting up PTZ functions:

- Auto Scan:** Includes buttons for 'Left Limit' and 'Right Limit'.
- Preset (Scope:1-32):** Includes a text input field with '1', and 'Add' and 'Delete' buttons.
- Auto Tour (Scope:1-6):** Includes a text input field with '1', and 'Add', 'Delete', and 'Delete Group' buttons.
- Pattern (Scope:1-1):** Includes a text input field with '1', and 'Start Record', 'Stop Record', and 'Delete' buttons.
- Assistant:** Includes a dropdown menu set to 'BLC', and 'Start' and 'Stop' buttons.
- Matrix:** Includes input fields for 'Monitor Output' (0), 'Video Input' (0), 'Matrix ID' (0), and a 'Video Switch' button.
- Light/Wiper:** Includes buttons for 'C_On' and 'C_Off'.

Auto Scan

In [Figure 6-13](#), move the camera to your desired location and then click **Left Limit**. Then move the camera again and then click **Right Limit** to set a right limit.

Pattern

In [Figure 6-13](#), you can input pattern value and then click start record button to begin PTZ movement. Please go back to [Figure 6-12](#) to implement camera operation. Then you can click stop record button. Now you have set one pattern.

Preset

In [Figure 6-13](#), move the camera to your desired location and then input preset value. Click add button, you have set one preset.

Auto tour

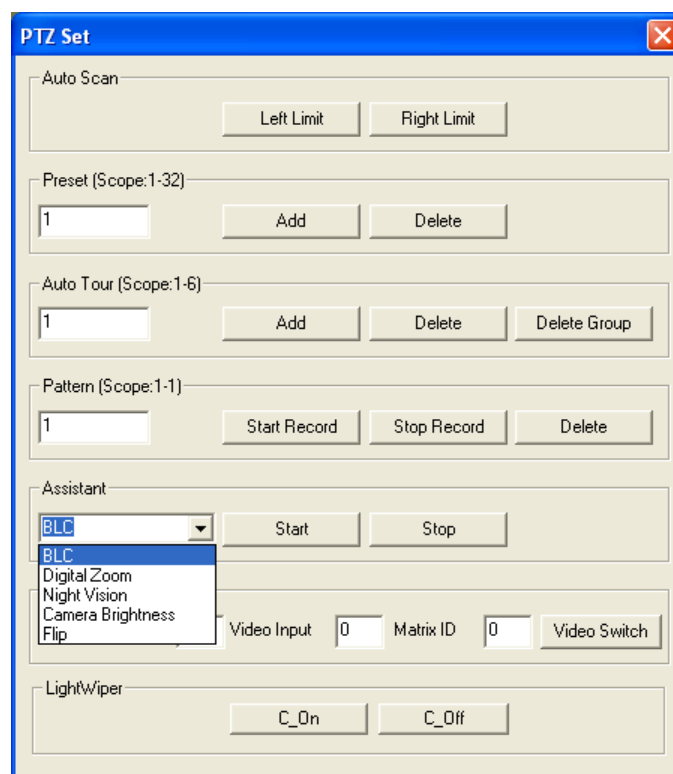
In [Figure 6-13](#), input auto tour value and preset value. Click add button, you have added one preset in the tour.

Repeat the above procedures you can add more presets in one tour.

Assistant

You can select the assistant item from the dropdown list. See [Figure 6-14](#).

Figure 6-14 The Assistant Setup Menu



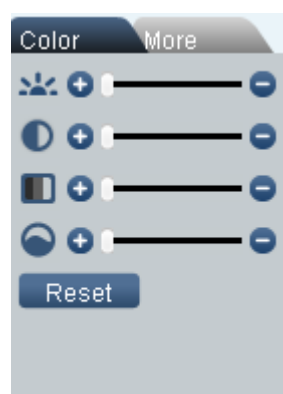
Color

Click "Color" in section 3, and the interface is shown as [Figure 6-15](#).

Here you can select one channel and then adjust its brightness, contrast, hue and saturation. (The Current channel border becomes green).

Or you can click the default button to use the system default setup.

Figure 6-15 The Color Setup Menu



Picture Path and Record Path

Click “More” in [Figure 6-15](#), and you can see an interface shown in [Figure 6-16](#).

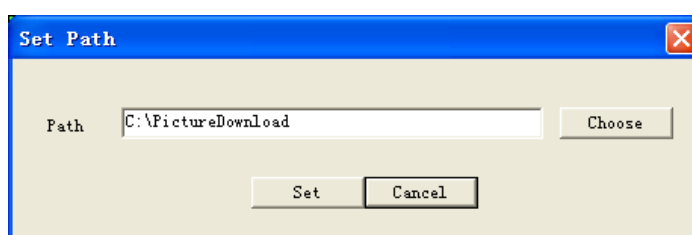
Figure 6-16 The More Setup Menu



Click **PIC Path**, and you can see an interface shown in [Figure 6-17](#).

Please click **Choose** to modify the path.

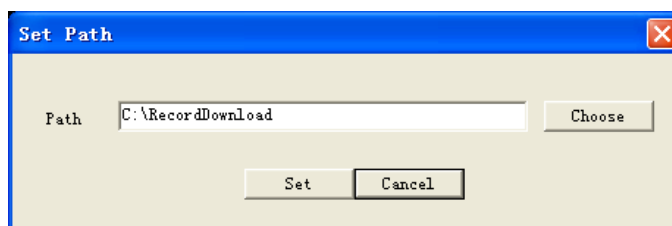
Figure 6-17 The Path Setup Menu (for Picture)



Click **REC Path**, and you can see an interface shown in [Figure 6-18](#).

Please click **Choose** to modify the path.

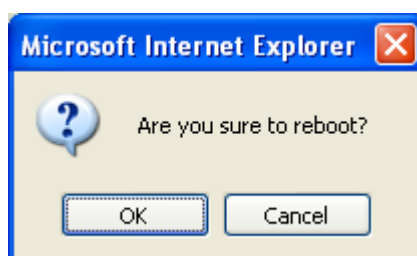
Figure 6-18 The Path Setup Menu (for Record)



Click **Reboot**, and the system pops up the following dialog box. See [Figure 6-19](#),

Please click **OK** to reboot.

Figure 6-19 The Reboot Dialog



Note

If there's an administrator (e.g. 888888) logged in DVR local menu, or web user doesn't have device reboot privilege, DVR won't be rebooted and a warning message box will be prompted.

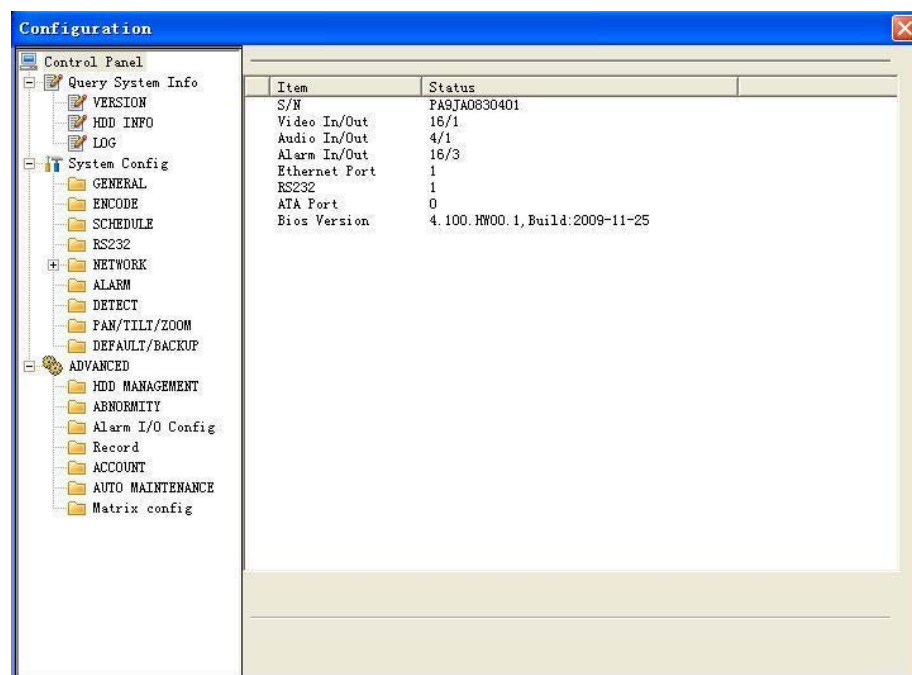
Configure

System Information

Version Information

Here you can view device hardware feature and software version information. See [Figure 6-20](#).

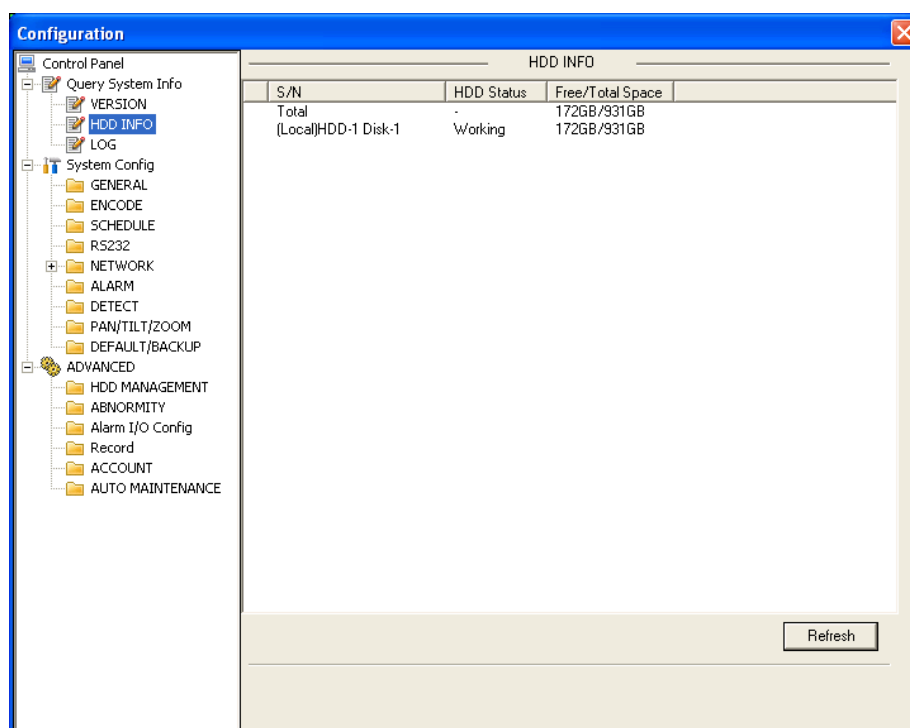
Figure 6-20 Version Information Menu



HDD information

Here you can view local storage status and network status including, free capacity and total capacity. See [Figure 6-21](#).

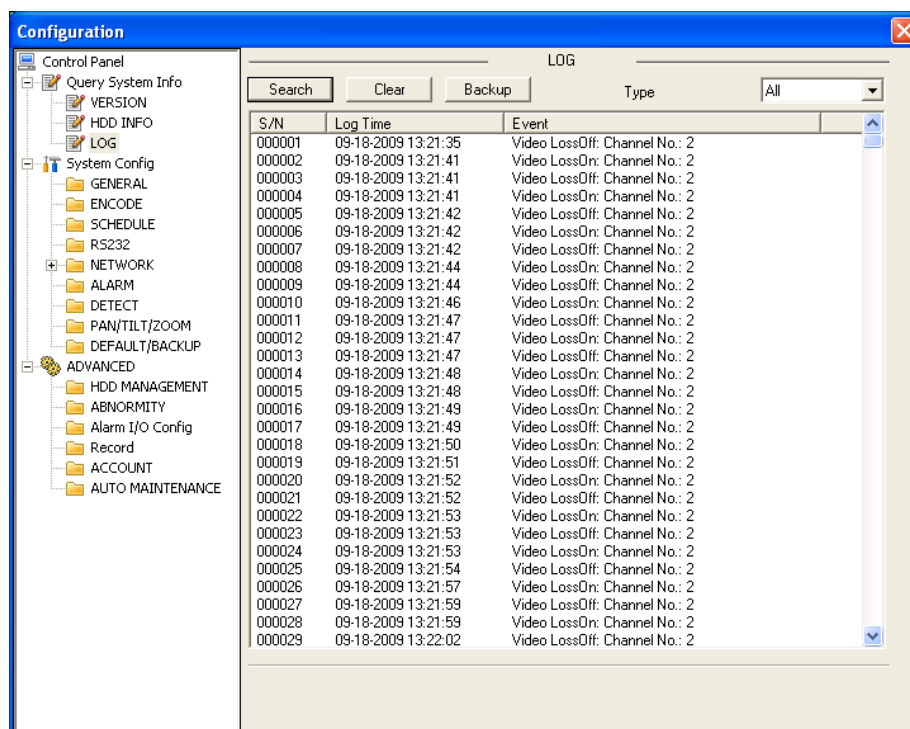
Figure 6-21 HDD Information Menu



Log

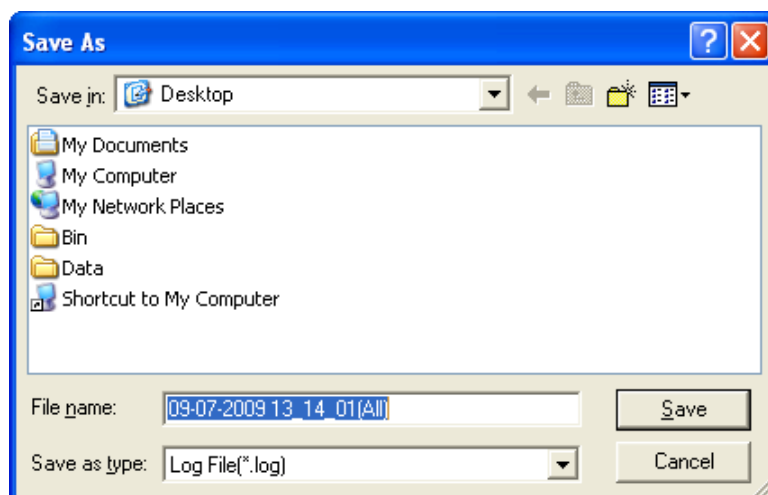
Here you can view system log. See [Figure 6-22](#).

Figure 6-22 Log Information Menu



Click **Backup**, and the interface is shown in [Figure 6-23](#).

Figure 6-23 Log Backup Menu



Please refer to the following sheet for log parameter information.

Parameter	Function
Type	Log types include: system operation, configuration operation, data management, alarm event, record operation, user management, log clear and file operation.
Search	You can select log type from the drop-down list and then click Search to view the list.
Clear	You can click this button to delete all displayed log files. Please note system does not support clear by type.
Backup	You can click this button to backup log files to current PC.

System Configuration

Please click **Save** to save your current setup.

General Setup

Here you can set system time, record length, video format, etc. See [Figure 6-24](#).

Figure 6-24 General Setup Menu

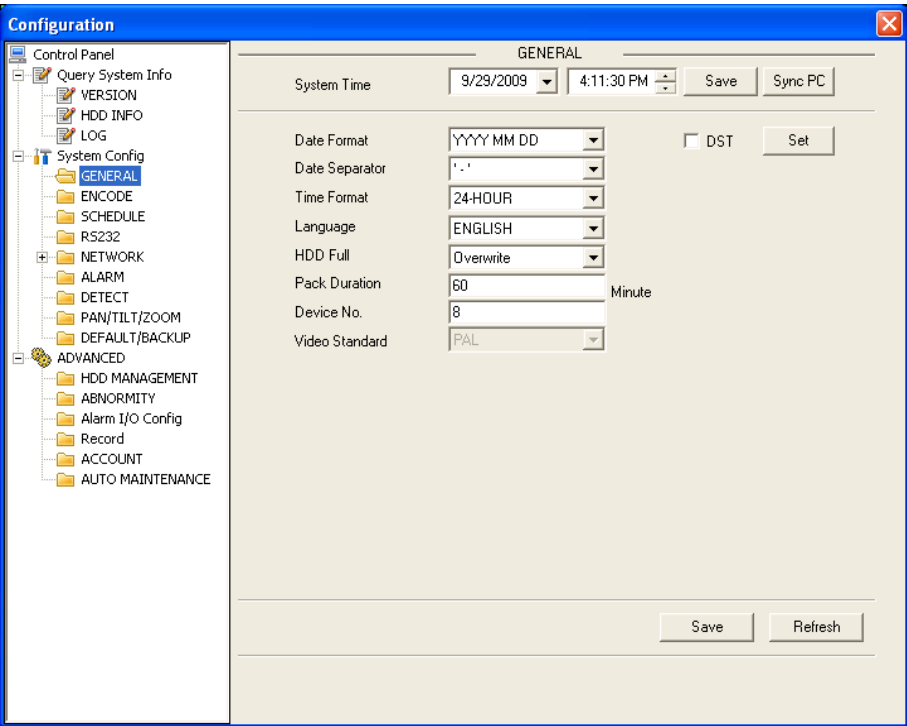


Figure 6-25 DST Setup Menu (Date)

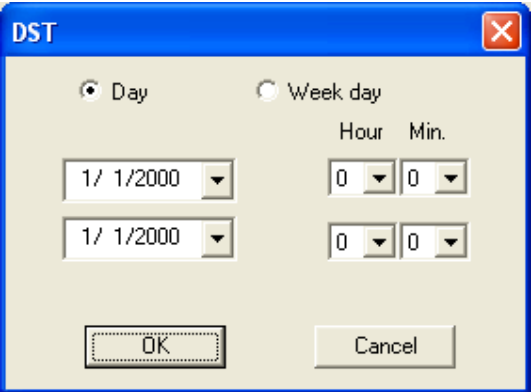
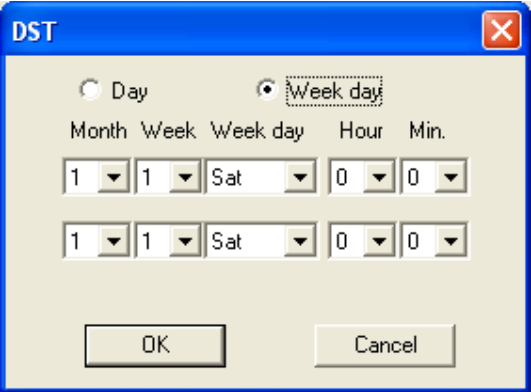


Figure 6-26 DST Setup Menu (Week)



Please refer to the following table for detailed information.

Parameter	Function
System Time	Here is for you to modify system time. Please click Save after your completed modification
Sync PC	You can click this button to save the system time as your PC current time.
Data Format	Here you can select data format from the dropdown list.
Data Separator	Please select separator such as – or /.
Time Format	There are two options: 24-H and 12-H.
DST	Here you can set day night save time begin time and end time. See <i>Figure 6-25</i> and <i>Figure 6-26</i> .
Language	You can select the language from the dropdown list. Device needs to reboot to get the modification activated. After reboot, please press F5 in IE or open a new IE window to update web client language.
HDD Full	There are two options: stop recording or overwrite the previous files when HDD is full.
Pack Duration	Here you can select file size. Default setup is 60 minutes.
Device No.	When you are using one remote control to manage multiple devices, you can give a serial numbers to the device.
Video Standard	Display video standard information: PAL/NTSC. Video standard can only be changed in local DVR GUI.

Encode

Encode interface is shown as in *Figure 6-27*.

Figure 6-27 The Encode Menu

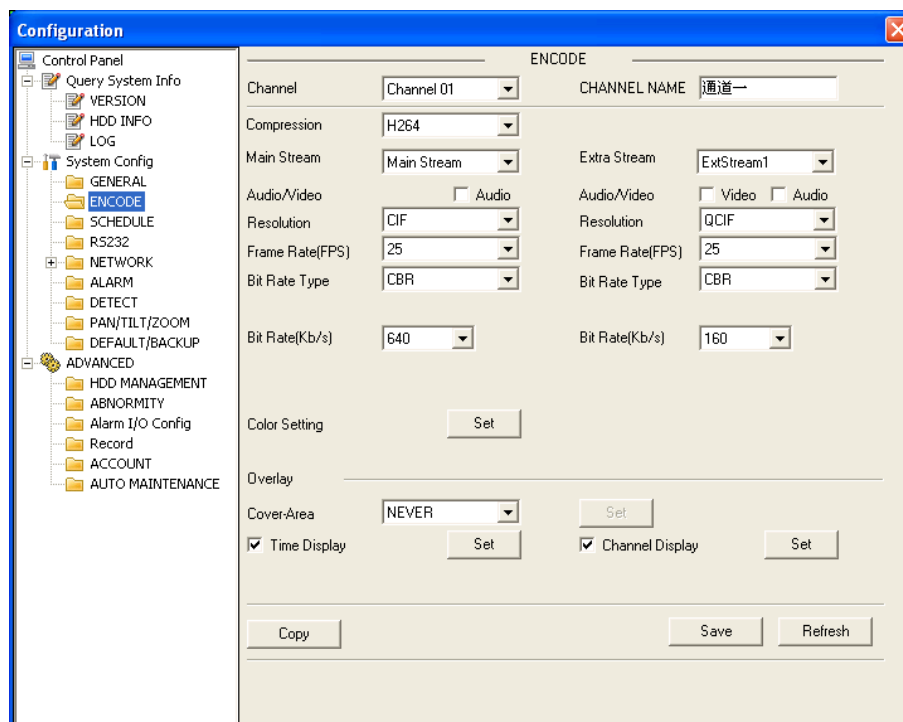
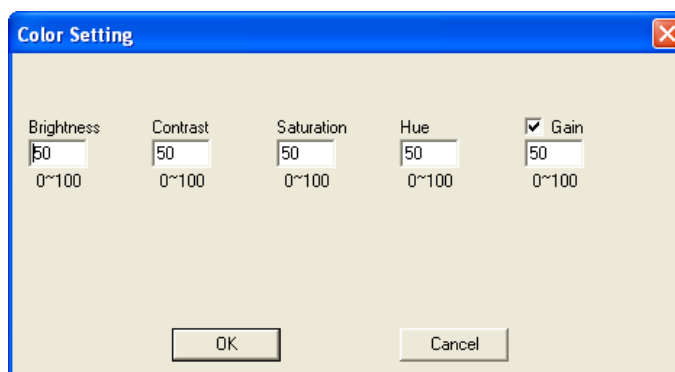


Figure 6-28 The Color Setting Menu



Please refer to the following table for detailed information.

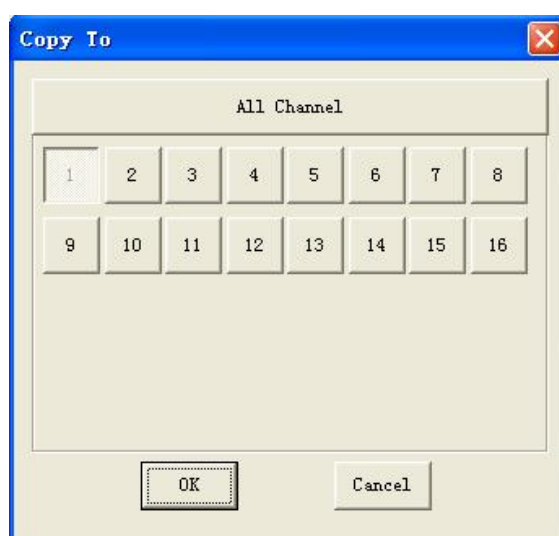
Parameter	Function
Channel	Here is for you to select a monitor channel.
Channel Name	Here is to display current channel name. You can modify it.
Compression	H.264
Main Stream	It includes main stream, motion stream and alarm stream. You can select different encode frame rates form different recorded events. System supports active control frame function (ACF). It allows you to record in different frame rates. For example, you can use high frame rate to record important events, record scheduled event in lower frame rate and it allows you to set different frame rates for motion detection record and alarm record.
Extra Stream	Select extra stream if you enabled the extension stream to monitor.
Audio/Video	Recorded file only contains video by default. You need to draw a circle here to enable audio function.
Resolution	For 16ch series: Main stream of channel 1 and channel 9 support D1/CIF/QCIF. Main stream of channel 2 to 8 and channel 10 to 16 support CIF only. Extra stream of channel 1 to channel 16 support QCIF only.
Frame Rate	PAL: 1~25f/s; NTSC: 1~30f/s
Bit Rate Type	There are two options: VBR and CBR. Please note, you can set video quality in VBR mode only.
Quality	The value ranges from 1 to 6. The level 6 is the best video quality.
Bit Rate	In CBR mode, actual bit rate is limited by this value The value only affect average bit rate in VBR mode. Please refer to recommend bit rate for the detailed information.
Recommended Bit Rate	Recommended bit rate value according to the resolution and frame rate you have set.
Color Setting	Here you can set video brightness, contrastness, hue, saturation and gain. The value ranges from 0 to 100.Default value is 50. See Figure 7-27.
Cover area (privacy mask)	Here you can privacy mask the specified video in the monitor video. System max supports 4 privacy mask zones.
Time Title	You can enable this function so that system overlays time information in video window. OSD transparent value is not applicable in current DVR version. You can use the mouse to drag the time tilte position.

Parameter	Function
Channel Title	You can enable this function so that system overlays channel information in video window. OSD transparent value is not applicable in current DVR version. You can use the mouse to drag the channel title position.
Copy	It is a shortcut menu button. You can copy current channel setup to one or more channels. The interface is shown as in <i>Figure 6-29</i> .
Save	You can click save button after you complete setup for one channel, or you can complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

Click copy interface, the interface is shown as in *Figure 6-29*.

If you have completed the setup for channel 1, you can click **3** to copy the current setup to channel 3. Or you can click **2, 3, and 4** to copy the current setup to channel 2, channel 3 and channel 4.

Figure 6-29 The Copy To Menu



Schedule

Here you can set different periods for various days. There are max six periods in one day. See *Figure 6-30*.

Figure 6-30 The Schedule Setup Menu

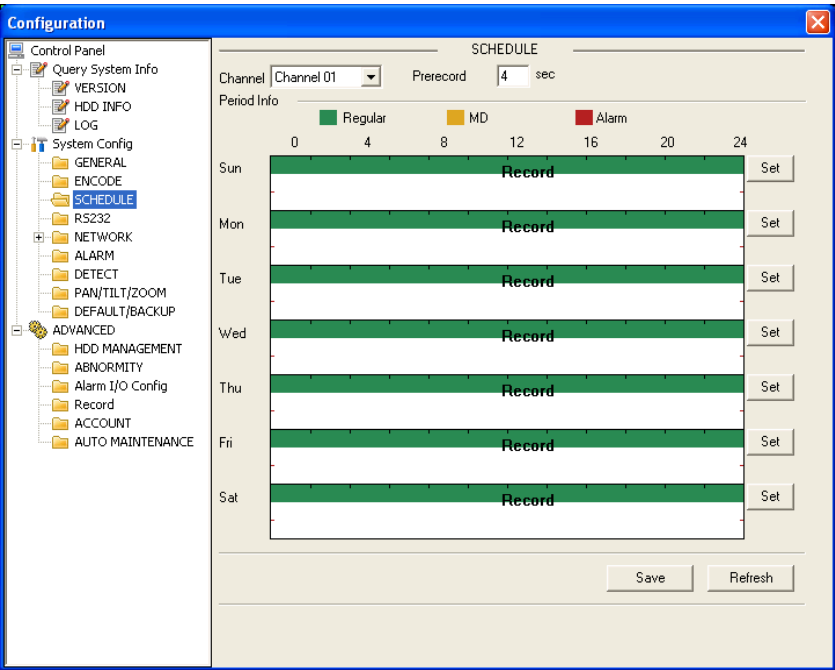
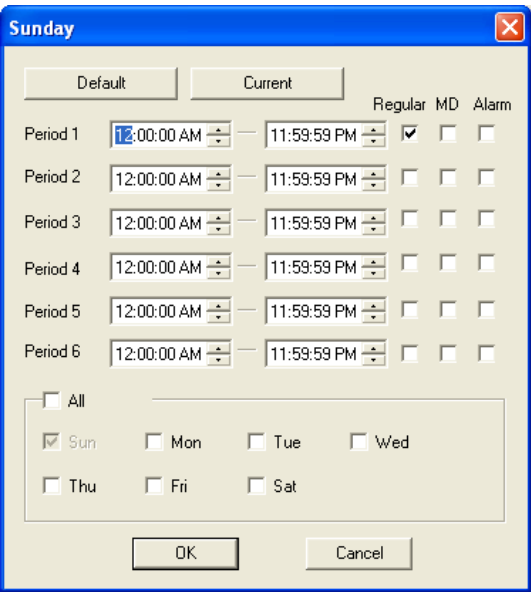


Figure 6-31 The Date and Time Setup Menu



Please refer to the following sheet for detailed information.

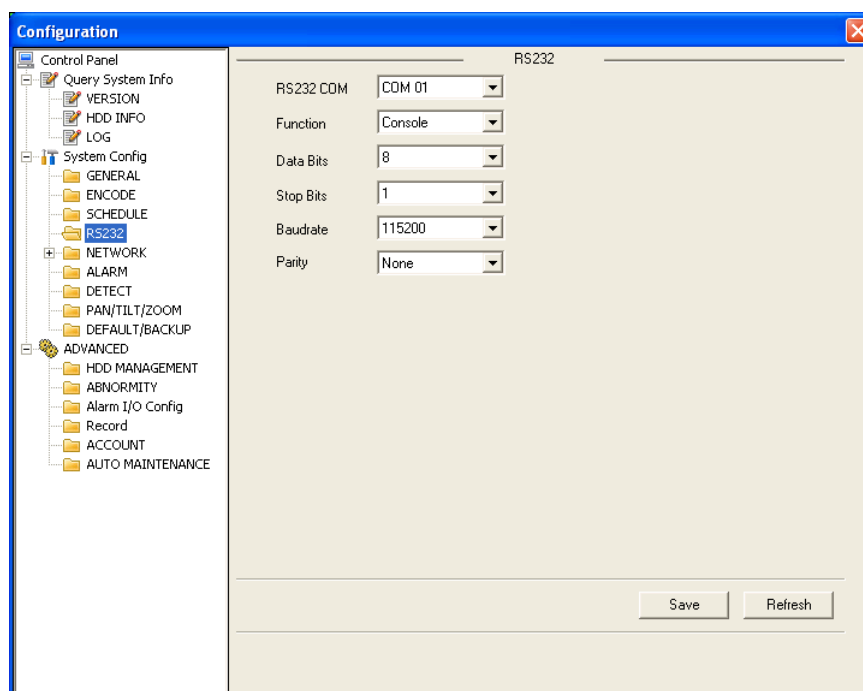
Parameter	Function
Channel	Please select a channel first.
Pre-record	Please input pre-record value here. System can record the three to five seconds video before activating the record operation into the file. (Depends on data size).
Setup	In Figure 6-30 , click Set , and you can go to the corresponding setup interface. Please set schedule period and then select corresponding record or snapshot type: schedule motion detection and alarm. Please select date (Current setup applies to current day by default. You can draw a circle before the week to apply the setup to the whole week.) After complete setup, please go back to Figure 6-30 and then click Save to save

Parameter	Function
	the current time period setup.
Copy	It is a shortcut menu button. You can copy current channel setup to one or more (all) channels. The interface is shown as in <i>Figure 6-29</i> .
Save	You can click Save after you complete setup for one channel, or you can complete the whole setups and then click Save .
Refresh	Click this button to get device latest configuration information.

RS232

The RS232 interface is shown in *Figure 6-32*.

Figure 6-32 The RS232 Setup Menu



Please refer to the following sheet for detailed information.

Parameter	Function
RS232	COM 01
Function	Console is for debug and upgrade. Adapter is for system integration and function enhancement
Data Bit	The value ranges from 5 to 8.
Stop Bit	There are two options: 1/2.
Baud Bit	You can select corresponding baud bit here.
Parity	There are five options: none/odd/even/mark/space.

System default setup

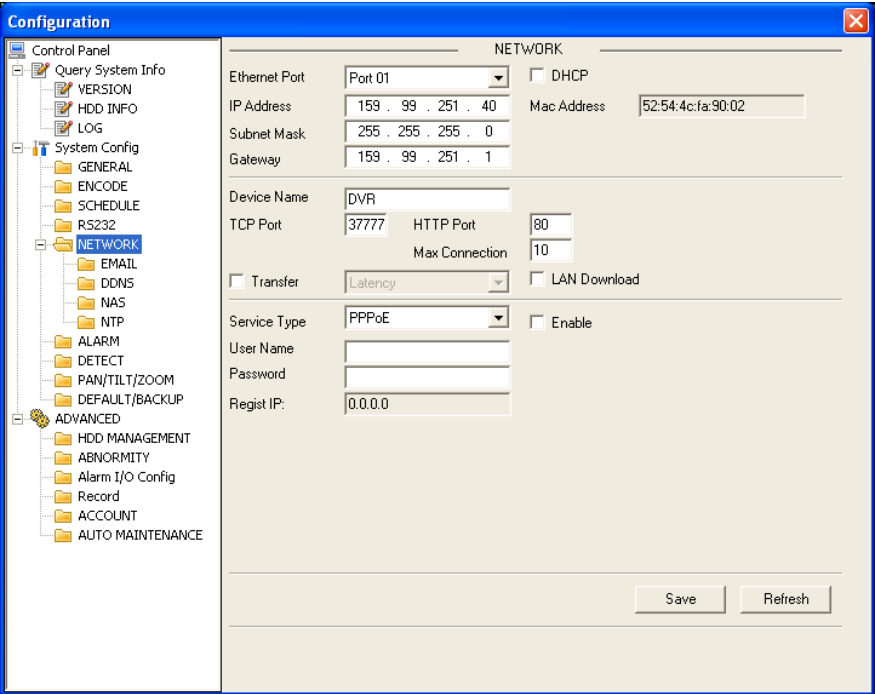
- Function: Console.
- Data bit: 8
- Stop bit: 1
- Baud bit: 115200

- Parity: None.

Network

The network interface is shown as in *Figure 6-33*.

Figure 6-33 The Network Setup Menu



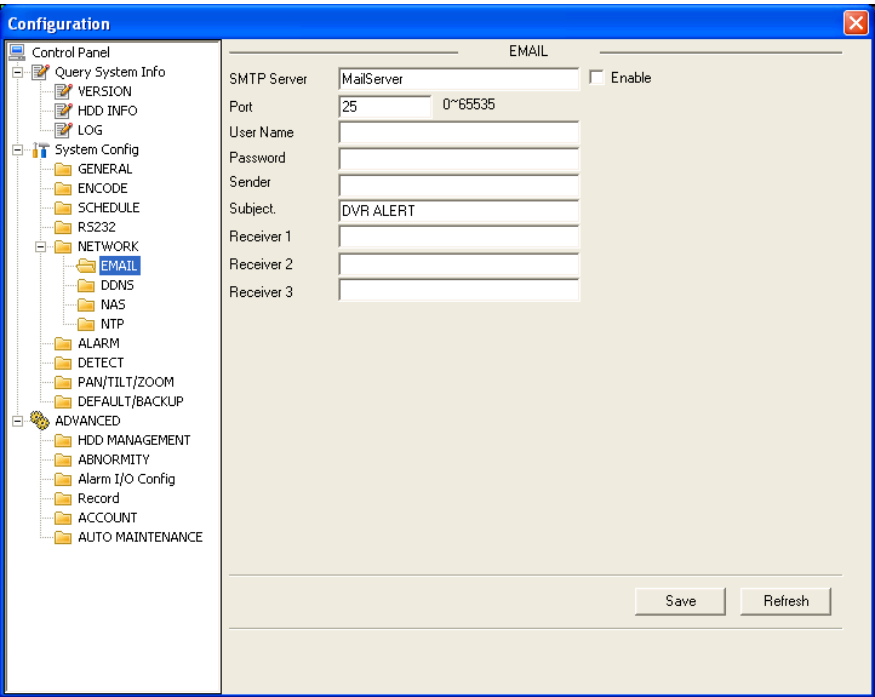
Please refer to the following sheet for detailed information.

Parameter		Function
Ethernet		Please select the network card first.
DHCP		Dynamically get IP address. You can get the device IP from the DHCP server if you enabled this function.
TCP Port		Default value is 37777.
HTTP Port		Default value is 80.
Max Connection		Network user max amount. The value ranges from 0 to 10. 0 means there is no user can access current device.
Remote Host	PPPOE	Input the PPPoE user name and password you get from the IPS (internet service provider) and enable PPPoE function. Please save current setup and then reboot the device to get the setup activated. Device connects to the internet via PPPoE after reboot. You can get the IP address in the WAN from the IP address column. Please note if you want to reboot the device please make sure you have proper reboot authority and there is no local login user in the current device.

Email

The email interface is shown in *Figure 6-33*.

Figure 6-34 The Email Setup Menu



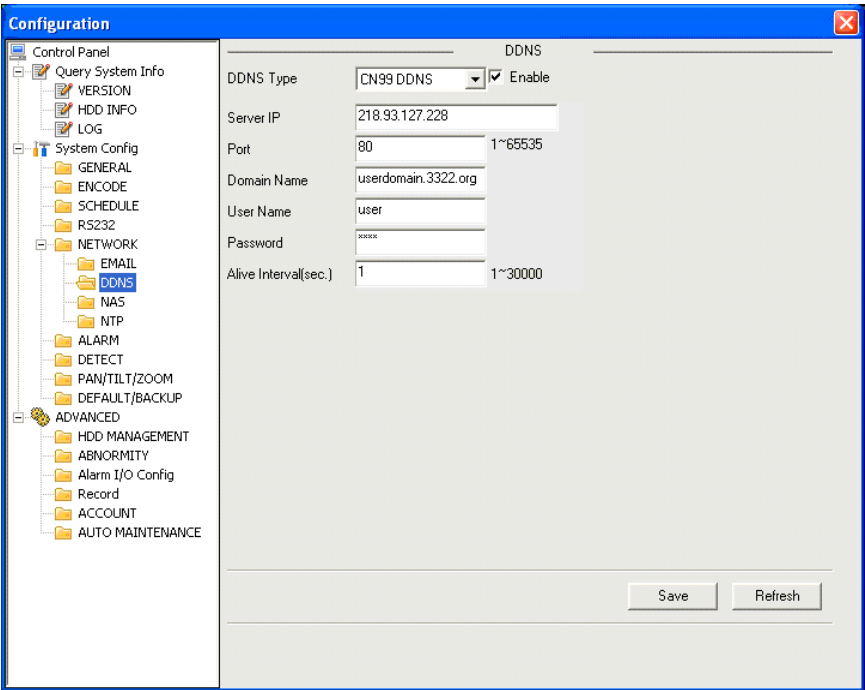
Please refer to the following sheet for detailed information.

Parameter	Function
SMTP Server	Input server address and then enable this function.
Port	Default value is 25. You can modify it if necessary.
User Name	The sender email account user name.
Password	The sender email account password.
Sender	Sender email address.
Subject	Input email subject here.
Address	Input receiver email address here. Max input three addresses.

DDNS

The DDNS interface is shown in *Figure 6-35*.

Figure 6-35 The DDNS Setup Menu



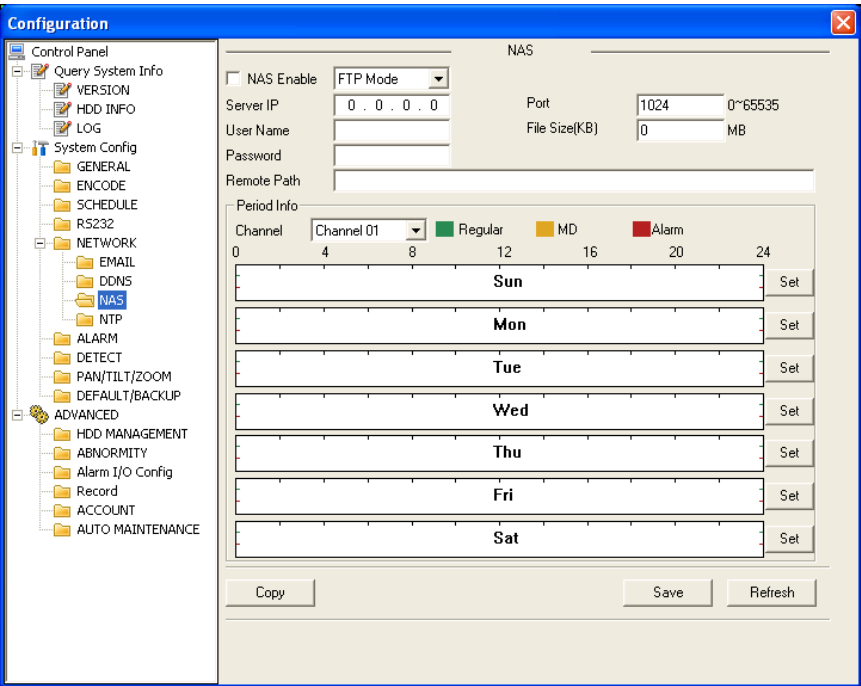
Please refer to the following sheet for detailed information.

Parameter	Function
Server Type	You can select DDNS protocol from the dropdown list and then enable DDNS function. The private DDNS protocol means you use your self-defined private protocol to realize DDNS function.
Server IP	DDNS server IP address
Server Port	DDNS server port.
Domain Name	Your self-defined domain name.
User	The user name you input to log in the server.
Password	The password you input to log in the server.
Interval	Device sends out alive signal to the server regularly. You can set interval value between the device and DDNS server here.

NAS

The NAS interface is shown as in *Figure 6-36*.

Figure 6-36 The NAS Setup Menu



Please refer to the following sheet for detailed information.

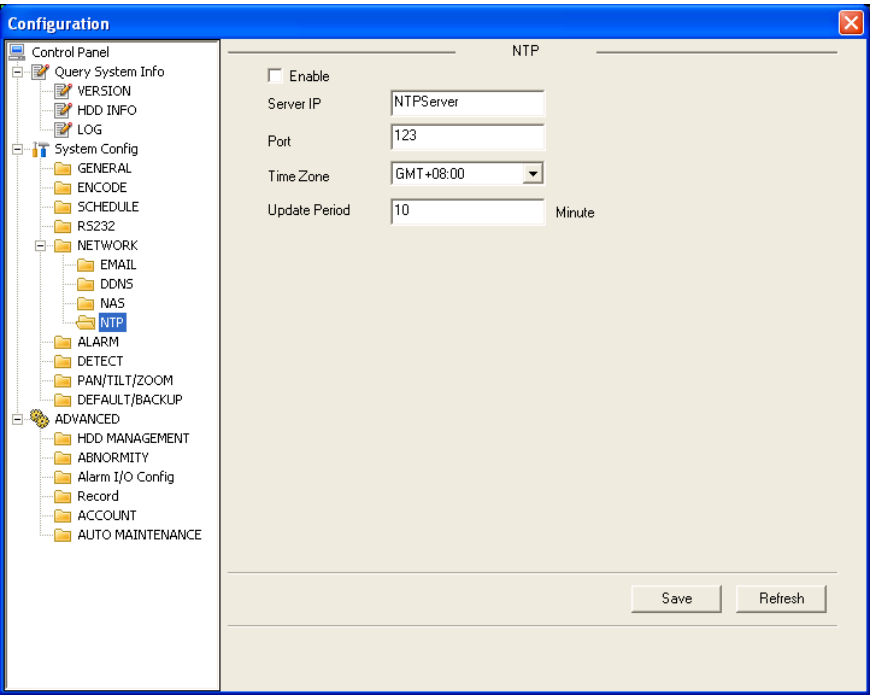
Parameter	Function
NAS enable	Please select network storage protocol and then enable NAS function.
Server IP	Input remote storage server IP address.
Port	Input Remote storage server-port number.
User Name	Log in user account.
File length	The file length you upload to the FTP. When setup is larger than the actual file length, system will upload the whole file. When setup here is smaller than the actual file length, the system only uploads the set length and auto ignore the left section. When interval value is 0, system uploads all corresponding files.
Password	The password you need to log in the server.
Remote Path	Remote storage file path.
Save	You can click Save after you complete setup for one channel, or you can complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

NTP

The NTP interface is shown in *Figure 6-37*.

Here you can realize network time synchronization. Please enable current function and then input server IP, port number, time zone and update interval.

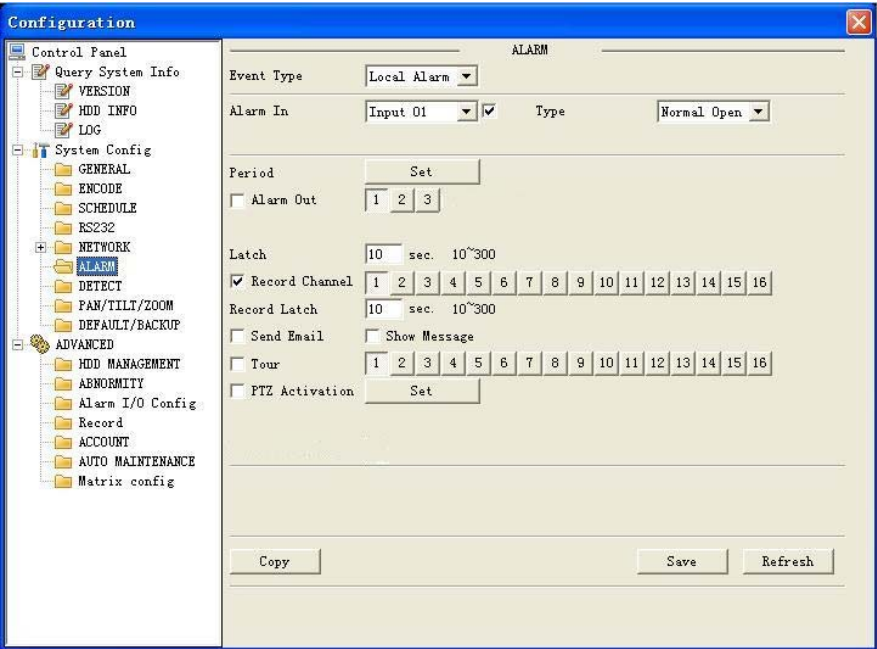
Figure 6-37 The NTP Setup Menu



Alarm

Alarm setup interface is shown as in *Figure 6-38*.

Figure 6-38 The Alarm Setup Menu



Please refer to the following sheet for detailed information.

Parameter	Function
Event Type	It includes local alarm/network alarm. Local alarm: Device detects alarm from input port. Network: Device detects alarm from network.
Alarm in	Select corresponding alarm channel.

Parameter	Function
Enable	You need to draw a circle here so that system can detect the alarm signal.
Type	There are two options: normal open and normal close. NO becomes activated in low voltage, NC becomes activated in high voltage.
Period	Alarm record function becomes activated in the specified periods. There are six periods in one day. Please draw a circle to enable corresponding period. Select date. If you do not select, current setup applies to today only. You can select all week column to apply to the whole week. Click OK button, system goes back to alarm setup interface, please click save button to exit.
Anti-dither	Not effective in current DVR version.
Normal Out	Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm Latch	System can delay the alarm output for specified time after alarm ended. The value ranges from 10 seconds to 300 seconds.
Record Channel	System auto activates current channel to record once alarm occurs (working with alarm activation function). Please note current device shall be in auto record mode (Chapter 4.4 Schedule).
Record Latch	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Email	Please draw a circle to enable email function. System can send out email to alert you when alarm occurs and ends.
Tour	Display video in local monitor window by tour. if there're record channels selected, only the record channels will be displayed in the tour.
PTZ activation	Here you can set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm. The PTZ configuration events include preset, auto-tour, and pattern.
Copy	It is a shortcut menu button. You can copy current channel setup to one or more (all) channels.
Save	You can click save button after you complete setup for one channel, or you can complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

Detect

Analysis the video, the system enables motion detection alarm when it detects the motion signal reached the specified sensitivity.

The detection interface is shown as in *Figure 6-39*.

Figure 6-39 The Detection Setup Menu

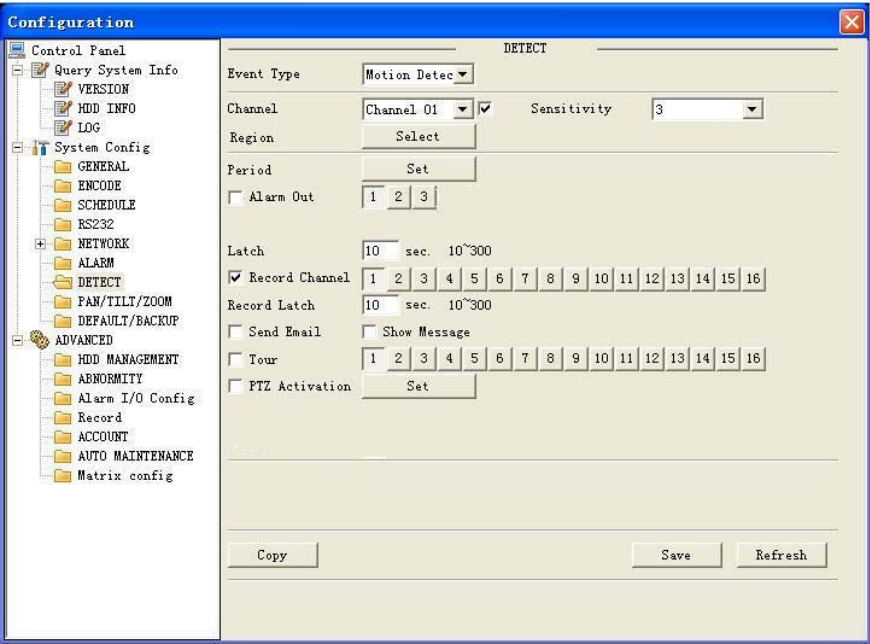
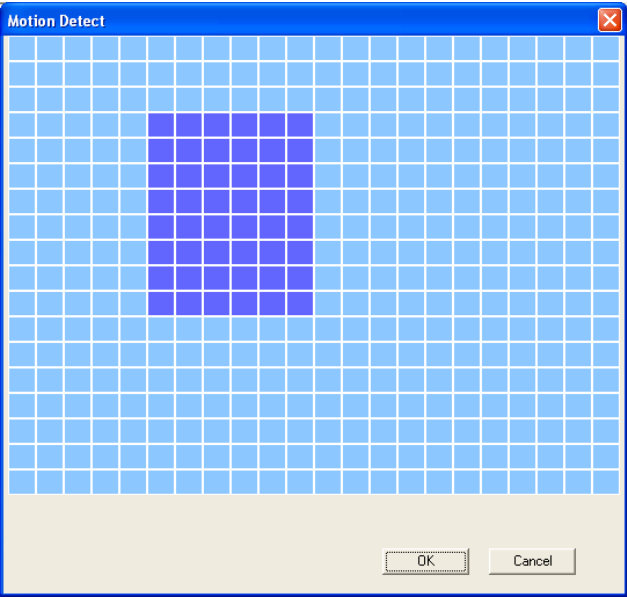


Figure 6-40 The Detection Zone Setup



Please refer to the following sheet for detailed information.

Parameter	Function
Event Type	There are three types: Motion detection/video loss/Camera Masking.
Channel	Select channel name from the dropdown list.
Enable	You need to draw a circle to enable motion detection function.
Sensitivity	There are six levels. The sixth level has the highest sensitivity.
Region	There are six levels. The sixth level has the highest sensitivity. Region: If you select motion detection type, you can click this button to set motion detection zone. The interface is shown in Figure 6-40 . There are PAL 22X18/NTSC 22X15 zones. Right-click and you can go to the full-screen display mode. Do remember to click OK to save your motion detection zone setup.

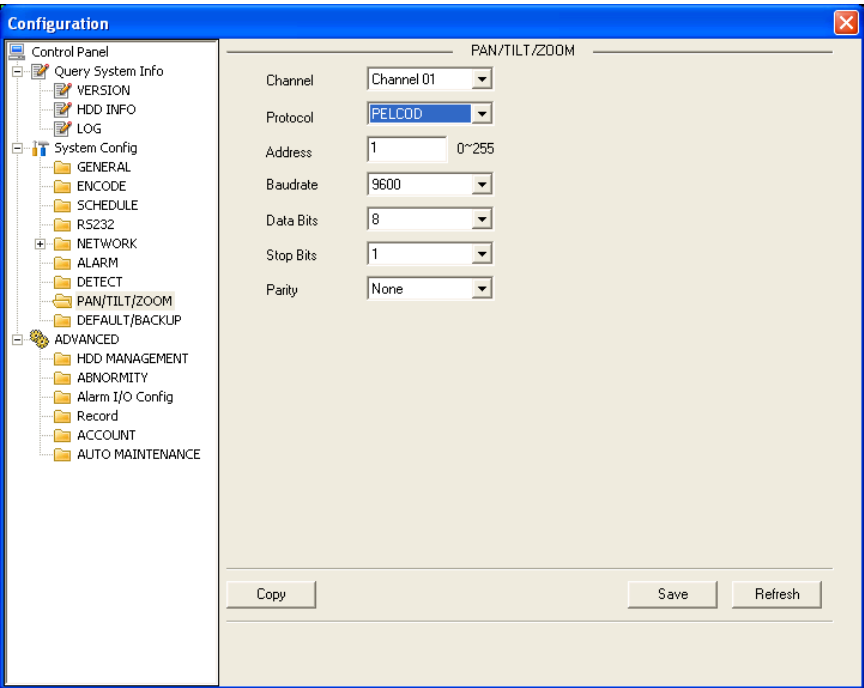
Period	Motion detection function becomes activated in the specified periods. There are six periods in one day. Please draw a circle to enable corresponding period. Select date. If you do not select, current setup applies to today only. You can select all week column to apply to the whole week. Click OK, and the system goes back to motion detection interface; please click Save to exit.
Anti-dither	Not Effective in the current DVR version.
Normal out	There is 3-channel alarm output. Corresponding to motion detection alarm output port(multiple choices) Enable alarm activation function. You need to select alarm output port so that system can activate corresponding alarm device when alarm occurs.
Alarm latch	System can delay the alarm output for specified time after alarm ended. The value ranges from 10s to 300s.
Record channel	System auto activates motion detection channel (multiple choices) to record once alarm occurs (working with motion detection function). Please note you need to go to Chapter 4.4 Schedule to set motion detection record period and go to chapter 4.2 Manual Record to set current period as auto record.
Record latch	System can delay the record for specified time after alarm ended. The value ranges from 10s to 300s.
Email	If you enabled this function, System can send out email to alert you when alarm occurs and ends.
Tour	Display video in local monitor window by tour. if there're record channels selected, only the record channels will be displayed in the tour.
PTZ Activation	Here you can set PTZ movement when alarm occurs. Such as go to preset x when there is an alarm.
Copy	It is a shortcut menu button. You can copy current channel setup to one or more (all) channels.
Save	You can click save button after you complete setup for one channel, or you can complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

PTZ

PTZ interface is shown as in *Figure 6-41*.

Please note that before operation make sure you have set speed dome address, and DVR and speed dome connection is OK.

Figure 6-41 The PTZ Setup Menu



Please refer to the following sheet for detailed information.

Parameter	Function
Channel	You can select monitor channel from the dropdown list. .
Protocol	Select the corresponding dome protocol.(such as PELCOD)
Address	Set corresponding dome address. Default value is 1. Please note your setup here shall comply with your dome address; otherwise you can not control the speed dome.
Baud Rate	Select the dome baud rate. Default setup is 9600.
Data Bit	Default setup is 8. Please set according to the speed dome dial switch setup.
Stop bit	Default setup is 1. Please set according to the speed dome dial switch setup.
Parity	Default setup is none. Please set according to the speed dome dial switch setup.
Save	You can click save button after you complete setup for one channel, or you can complete the whole setups and then click save button.
Refresh	Click this button to get device latest configuration information.

Default & Backup

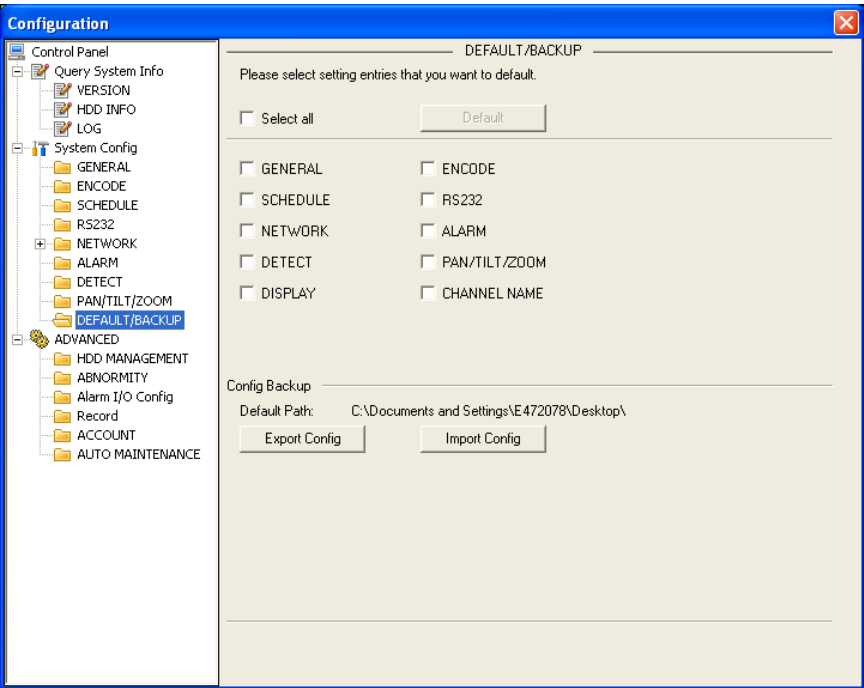
Default: Restore the factory default settings. You can select corresponding items.

Backup: Export current configuration to local PC or import configuration from current PC.

Please refer to *Figure 6-42*.

Please note that the system cannot restore some information such as network IP address.

Figure 6-42 The Default Setup Menu



Please refer to the following sheet for detailed information.

Parameter	Function
Select All	Restore the factory default settings.
Export Configuration	Export system configuration to the local PC.
Import Configuration	Import configuration from PC to the system.

Advanced

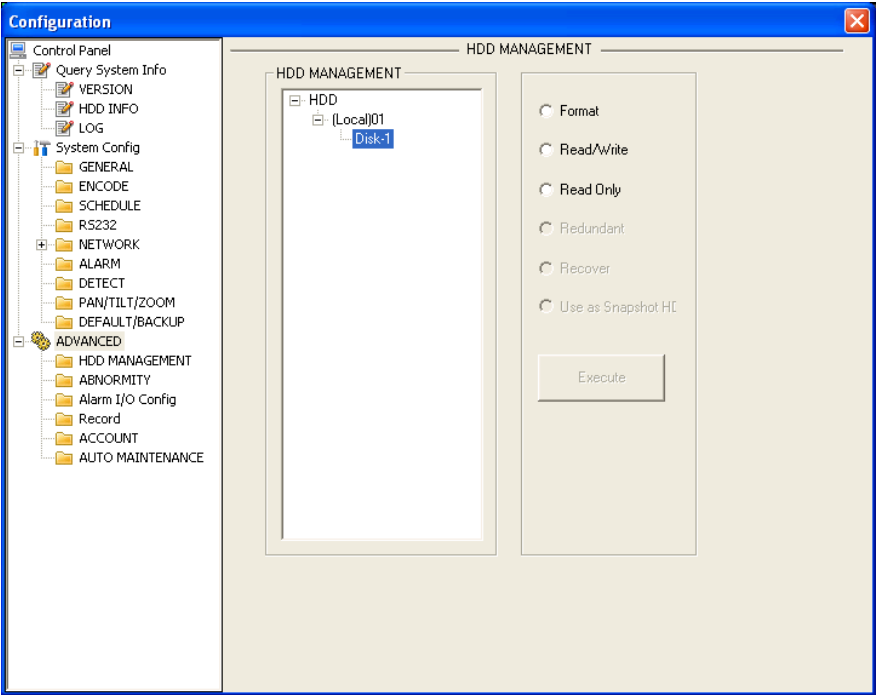
HDD Management

HDD management includes net storage management and local storage management.

Please note that if you want to use local storage function, your storage device need to support the current function.

Please select the storage device first and then you can see the items on your right become valid. You can check the corresponding item here. See *Figure 6-43*.

Figure 6-43 The HDD Management Menu



Please refer to the following sheet for detailed information.

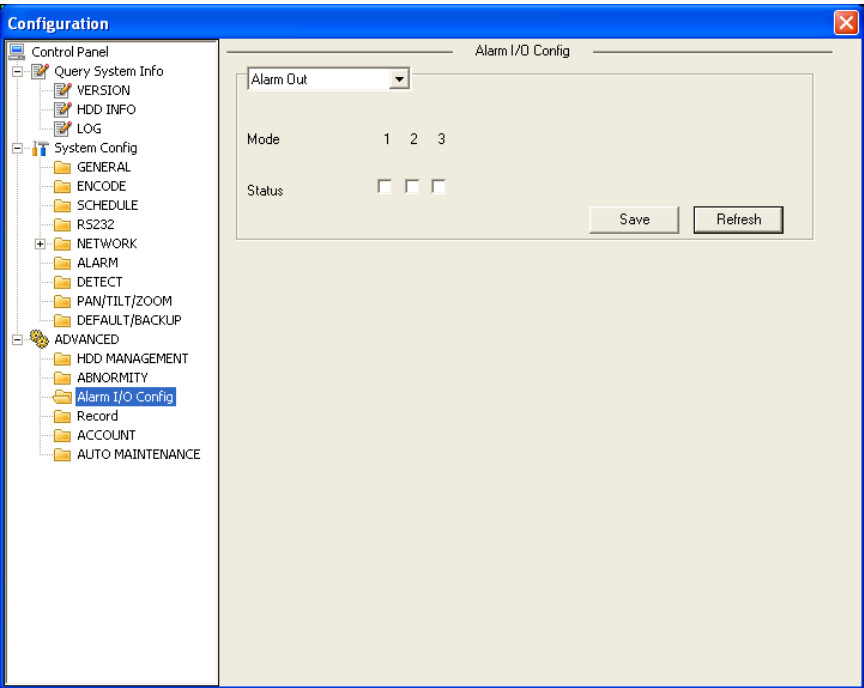
Parameter	Function
Format	Clear data in the disk.
Read/write	Set current SD card as read/write
Read only	Set current card as read.
Recover	Recover data after error occurs.

Please note system needs to reboot to activate current setup.

Alarm I/O

Here you can search alarm output status. See *Figure 6-44*.

Figure 6-44 The Alarm Out Menu



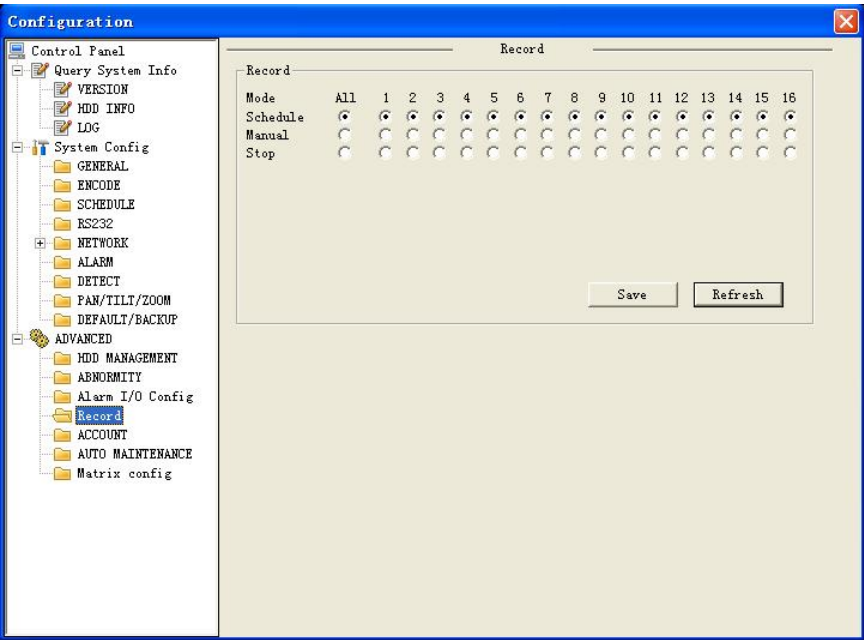
Please refer to the following sheet for detailed information.

Parameter	Function
Alarm output	There are three output channels.
Save	You can click save button after you complete
Refresh	Search alarm output status.

Record

Record control interface is shown as in *Figure 6-44*.

Figure 6-45 The Record Control Menu



Please refer to the following sheet for detailed information.

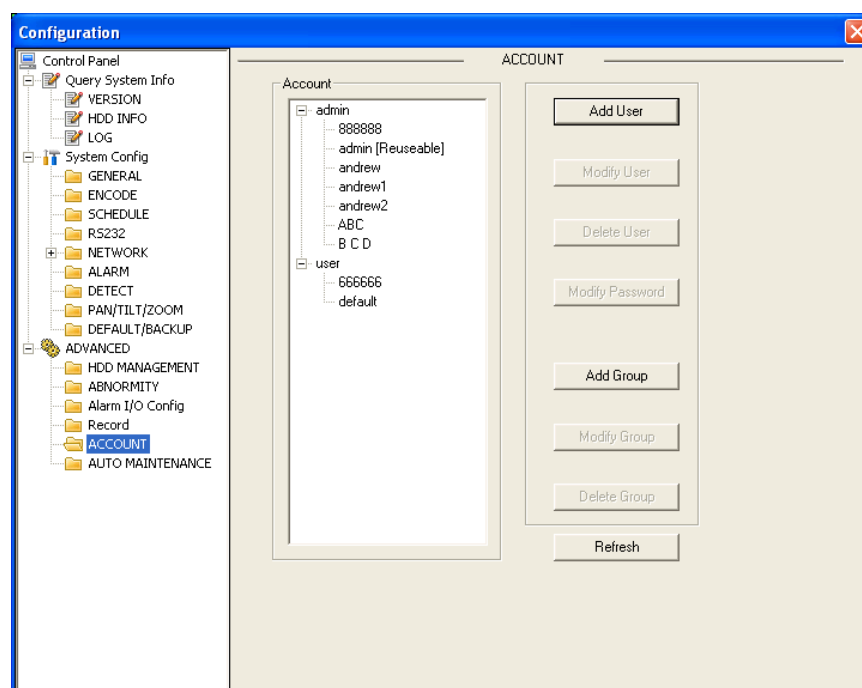
Parameter	Function
Schedule (Auto)	System enables the auto record function as you set in record schedule setup.
Manual	Enable corresponding channel to record no matter what period applied in the record setup.
Stop	Stop current channel record no matter what period applied in the record setup.

Operation here is the same to chapter 4.2 Manual Record. Please refer to chapter 4.2 for detailed information.

Account

Here you can add, remove user or modify password. See *Figure 6-46*.

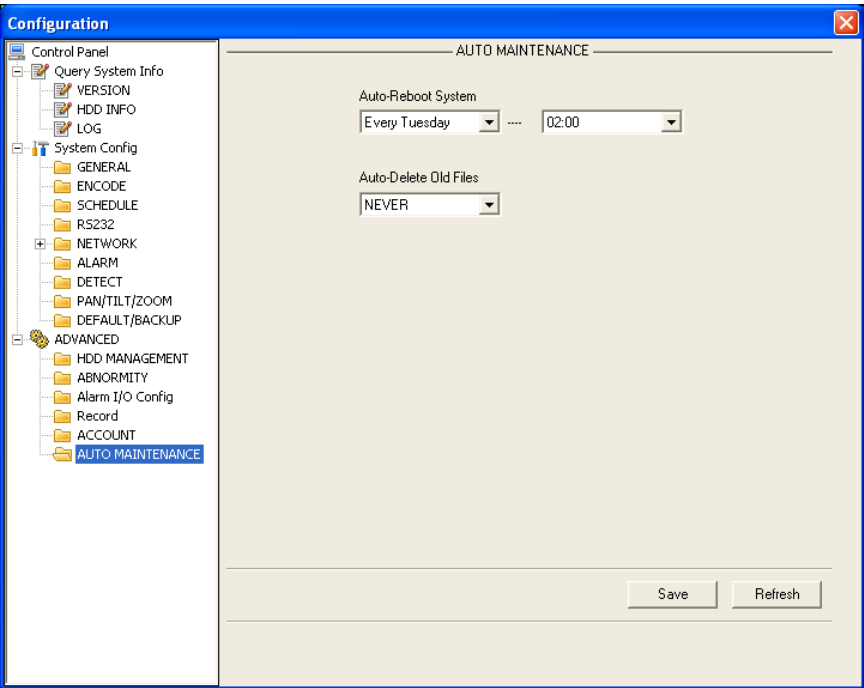
Figure 6-46 The Account Management Menu



Auto Maintenance

Here you can select auto reboot and auto delete old files interval from the dropdown list. See *Figure 6-47*.

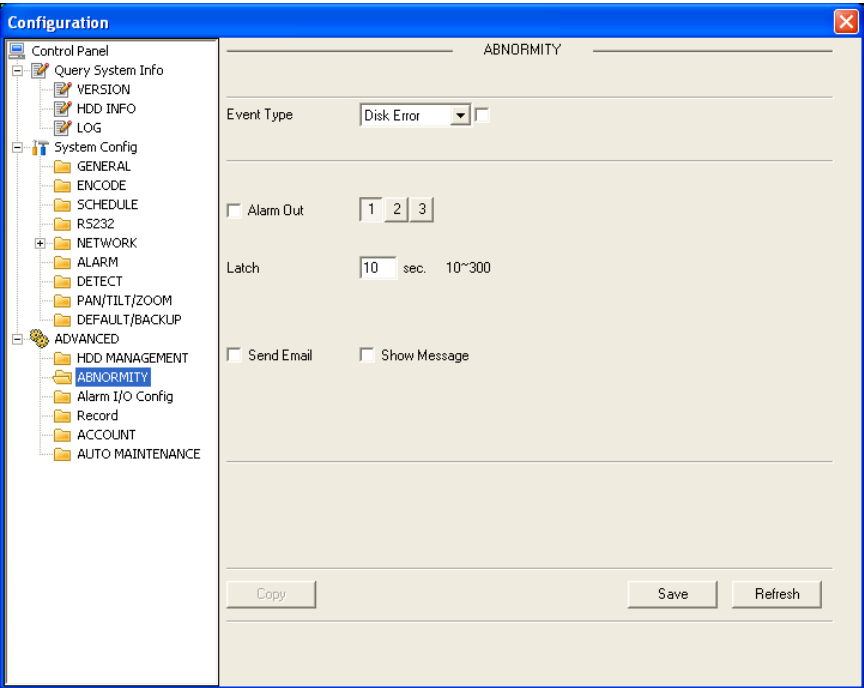
Figure 6-47 The Auto Maintain Menu



Abnormity

The abnormity interface is shown as below.

Figure 6-48 The Abnormity Setup Menu



Please refer to the following sheet for detailed information.

Parameter	Function
Event Type	The abnormal events include: no disk,disk no space, disk error, net eerror. You need to draw a circle to enable this function.
Normal Out	The corresponding alarm activation output channel when alarm occurs, There are three channels. The 3-ch is the controllable 12V output.

Latch	The alarm output can delay for the specified time after alarm stops. Then system disables alarm and corresponding activation output. The value ranges from 10s to 300s.
Send email	If you enable this function, system can send out email to alarm the specified user.
Show message	System can display alarm information in local DVR screen.

Search

Click **Search**, and you can see an interface shown in *Figure 6-49*.

Please select record playback mode, and then select start time, end time and channel. Then please click search button, you can see the corresponding files in the list.

Figure 6-49 The Record Search Menu

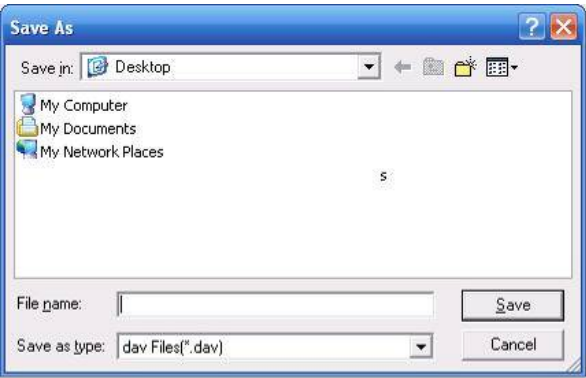
The screenshot shows a 'Search' window with the following sections:

- Type:** Radio buttons for Record (selected), Alarm, Motion, Local, Picture, and Card.
- Parameter:**
 - Begin Time: 2009-11-26 17:39:56
 - End Time: 2009-11-27 20:39:56
 - Channel: All
 - Earliest Rec button
- Operation:**
 - Search button
 - Playback button
 - Download Type: File
 - Download button
 - Open Local Record button
- Multiple-channel Playback:** Checkboxes for channels 1 through 16.
- Table:**

S/N	File Siz...	Begin Time	End Time	Record Type	Cha...
1	640	2009-11-27 12:41:42	2009-11-27 12:41:51	Regular	1
2	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	2
3	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	3
4	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	4
5	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	5
6	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	6
7	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	7
8	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	8
9	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	9
10	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	10
11	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	11
12	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	12
13	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	13
14	32	2009-11-27 12:41:42	2009-11-27 12:41:45	Regular	14
- Download Speed:** 0 k/s

Select the files you want to download and then click **Download**, and the system pops up a dialogue box shown in *Figure 6-50*. Then you can specify file name and path to download the files to your local pc.

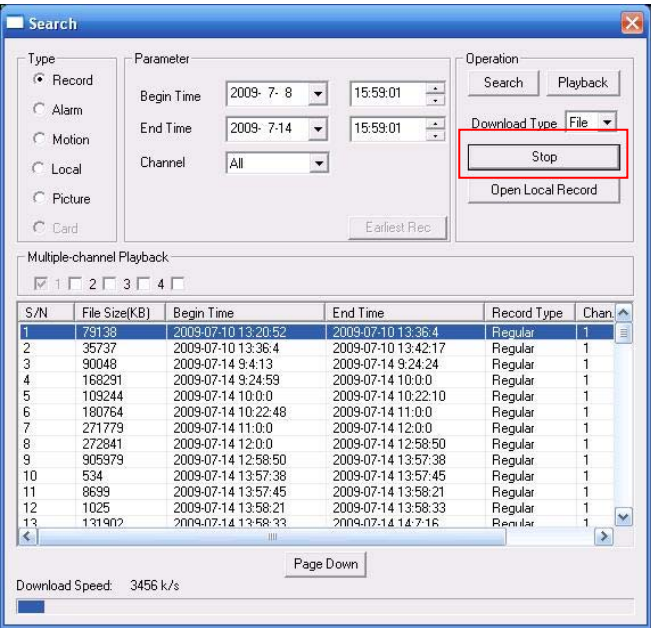
Figure 6-50 The Record Save Menu



Now you can see the system begins to download and the **Download** button changes to the **Stop** button. You can click it to terminate current operation.

At the bottom of the interface, there is a process bar for your reference. See [Figure 6-51](#).

Figure 6-51 The Record Search Menu (Saving)



When download completed, you can see a dialogue box shown in [Figure 6-52](#). Please click **OK** to exit.

Figure 6-52 The Message Box after Download Completed



Please refer to the following table for detailed information.

Type	Parameter	Function
Type	Record	Search general record, alarm record and motion detection record.
	Alarm	Search alarm record.
	Motion Detection	Search motion detection record.
	Local	Search local record.
	Snapshot	Search snapshot file.
	Card	This function is not available in current device.
Item	Begin time	Set the file start time. You can select from the dropdown list.
	End time	Set the file end time. You can select from the dropdown list
	Channel	Select the channel from the dropdown list.
Operation	Search	Click this button you can view the recorded file matched your requirements.
	Playback	Select the file first and then click Playback to view the video.
	Download type	Download by file: Select the files and then click Download . Download by time: Download the recorded files within your specified period.
	Download	Select the file you need (multiple choices) and then click Download , and you can see system pops up a dialogue box. See <i>Figure 6-50</i> . Input the downloaded file name, specify the path and then click OK . You can see system begins download and the download becomes stop button. There is a progress bar for your reference.
	Open local record	Select local record to play.
Multiple-channel playback		The system supports playback one file in several monitor channels.

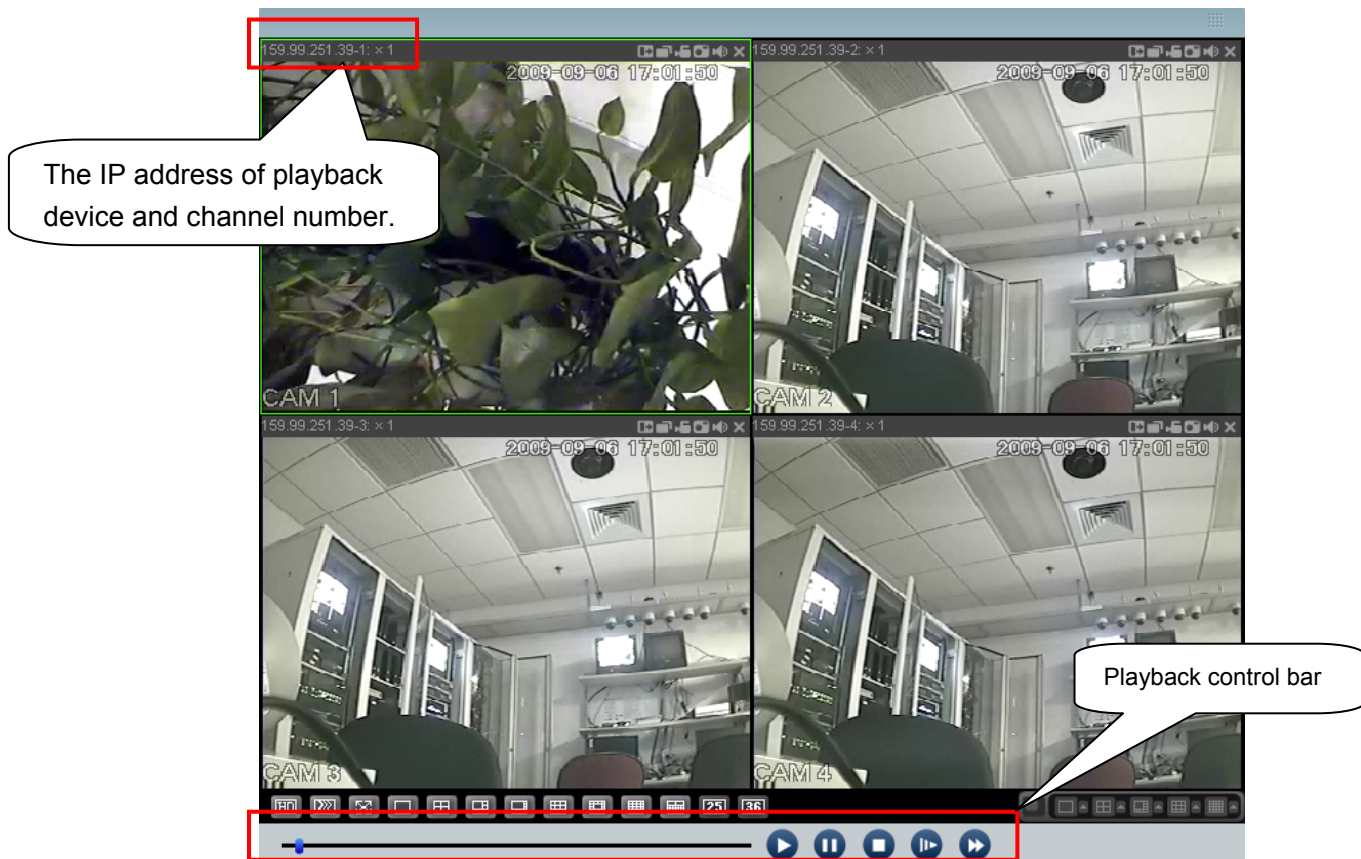
During the playback process, you can see there are control buttons such as play, pause, stop, slow play and fast play in the play process bar. You can view current playback file channel name, time and data statistics.

In the search result interface, you can select one or more files to download to your local PC.

The playback control bar is shown as below. See Figure 6-53.

- Play
- Pause
- Stop
- Slow play
- Fast play

Figure 6-53 The Playback Menu



Alarm

Click alarm function, and you can see an interface is shown in *Figure 6-54*. Here you can set device alarm type and alarm sound setup.

Figure 6-54 The Alarm Function Menu

[illegible]

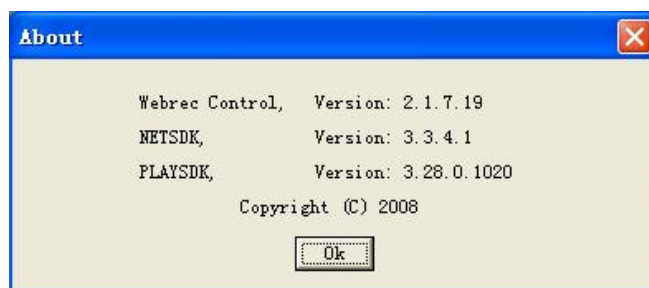
Please refer to the following table for detailed information.

Type	Parameter	Function
Alarm Type	Video loss	System alarms when video loss occurs.
	Motion detect	System alarms when motion detection alarm occurs,
	Disk full	System alarms when disk is full.
	Disk error	System alarms when disk error occurs.
	Video mask	Camera mask. System alarms when camera is viciously masked.
	External alarm	Alarm input device sends out alarm.
Operation	Listen alarm	System notifies web when alarm occurs (you select from the above event type), and then web can notify user.
	Video pop-up	When alarm occurs, system auto enables video monitor. This function only applies to video detection alarm (motion detection, video loss and camera masking).
	Prompt	Automatically pops up alarm dialogue box.
	Sound pop-up	System sends out alarm sound when alarm occurs. You can specify as you wish.
	Sound Path	Here you can specify alarm sound file path.

About

Click **About**, and you can view the current web client information. See *Figure 6-55*.

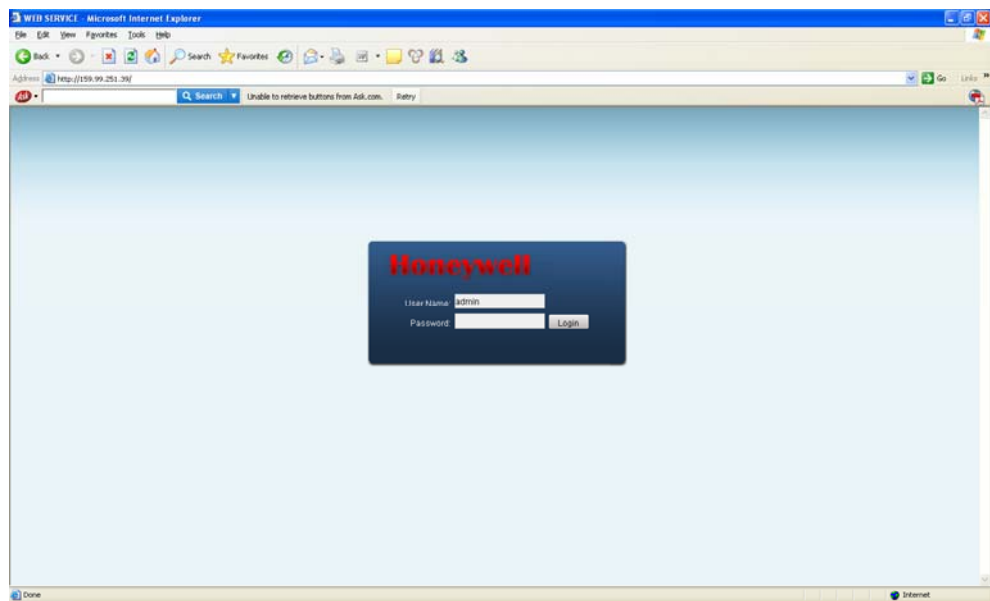
Figure 6-55 The Web Client Information



Log out

Click **Log out**, and the system goes back to log in interface. See *Figure 6-56*.

You need to input user name and password to login again.

Figure 6-56 The Logout Interface

Un-install Web Control

You can use web un-install tool "uninstall webrec.bat" in the CD to un-install web control.

Note

Before un-installation, please close all web pages, otherwise the un-installation might result in error.

7 FAQ

1. DVR can not boot up properly.

There are following possibilities:

- Input power is not correct.
- Power connection is not correct.
- Power switch button is damaged.
- Program upgrade is wrong.
- HDD malfunction or something wrong with HDD ribbon.
- Front panel error.
- Main board is damaged.

2. DVR often automatically shuts down or stops running.

There are following possibilities:

- Input voltage is not stable or it is too low.
- HDD malfunction or something wrong with the ribbon.
- Button power is not enough.
- Front video signal is not stable.
- Working environment is too harsh, too much dust.
- Hardware malfunction.

3. System can not detect hard disk.

There are following possibilities:

- HDD is broken.
- HDD ribbon is damaged.
- HDD cable connection is loose.
- Main board SATA port is broken.

4. There is no video output whether it is one-channel, multiple-channel or all-channel output.

There are following possibilities:

- Program is not compatible. Please upgrade to the latest version.
- Brightness is 0. Please restore factory default setup.
- There is no video input signal or it is too weak.
- Check privacy mask setup or your screen saver.
- DVR hardware malfunctions.

5. Real-time video color is distorted.

There are following possibilities:

- When using BNC output, NTSC and PAL setup is not correct. The real-time video becomes black and white.
- DVR and monitor resistance is not compatible.
- Video transmission is too long or degrading is too huge.
- DVR color or brightness setup is not correct.

6. Can not search local records.

There are following possibilities:

- HDD ribbon is damaged.
- HDD is broken.
- Upgraded program is not compatible.
- The recorded file has been overwritten.
- Record function has been disabled.

7. Video is distorted when searching local records.

There are following possibilities:

- Video quality setup is too low.
- Program read error, bit data is too small. There is mosaic in the full screen. Please restart the DVR to solve this problem.
- HDD data ribbon error.
- HDD malfunction.
- DVR hardware malfunctions.

8. There is no audio when monitor.

There are following possibilities:

- It is not a power picker.
- It is not a power acoustics.
- Audio cable is damaged.
- DVR hardware malfunctions.

9. There is audio when monitor but there is no audio when system playback.

There are following possibilities:

- Setup is not correct. Please enable audio function
- Corresponding channel has no video input. Playback is not continuous when the screen is blue.

10. Time display is not correct.

There are following possibilities:

- Setup is not correct
- Battery contact is not correct or voltage is too low.
- Crystal is broken.

11. DVR can not control PTZ.

There are following possibilities:

- Front panel PTZ error
- PTZ decoder setup, connection or installation is not correct.
- Cable connection is not correct.
- PTZ setup is not correct.
- PTZ decoder and DVR protocol is not compatible.
- PTZ decoder and DVR address is not compatible.
- When there are several decoders, please add 120 Ohm between the PTZ decoder A/B cables furthest end to delete the reverberation or impedance matching. Otherwise the PTZ control is not stable.
- The distance is too far.

12. Motion detection function does not work.

There are following possibilities:

- Period setup is not correct.
- Motion detection zone setup is not correct.
- Sensitivity is too low.
- For some versions, there is hardware limit.

13. Can not log in client-end or web.

There are following possibilities:

- For Windows 98 or Windows ME user, please update your system to Windows 2000 sp4. Or you can install client-end software of lower version. Please note right now, our DVR is not compatible with Windows VISTA control.
- ActiveX control has been disabled.
- No dx8.1 or higher. Please upgrade display card driver.
- Network connection error.
- Network setup error.
- Password or user name is invalid.
- Client-end is not compatible with DVR program.

14. There is only mosaic no video when preview or playback video file remotely.

There are following possibilities:

- Network fluency is not good.

- Client-end resources are limit.
- There is multiple-cast group setup in DVR. This mode can result in mosaic. Usually we do not recommend this mode.
- There is privacy mask or channel protection setup.
- Current user has no right to monitor.
- DVR local video output quality is not good.

15. Network connection is not stable.

There are following possibilities:

- Network is not stable.
- IP address conflict.
- MAC address conflict.
- PC or DVR network card is not good.

16. Burn error /USB back error.

There are following possibilities:

- Burner and DVR are in the same data cable.
- System uses too much CPU resources. Please stop record first and then begin backup.
- Data amount exceeds backup device capacity. It may result in burner error.
- Backup device is not compatible.
- Backup device is damaged.

17. Keyboard can not control DVR.

There are following possibilities:

- DVR serial port setup is not correct .
- Address is not correct .
- When there are several switchers, power supply is not enough.
- Transmission distance is too far.

18. Alarm signal can not been disarmed.

There are following possibilities:

- Alarm setup is not correct.
- Alarm output has been open manually.
- Input device error or connection is not correct.
- Some program versions may have this problem. Please upgrade your system.

19. Alarm function is null.

There are following possibilities:

- Alarm setup is not correct.
- Alarm cable connection is not correct.
- Alarm input signal is not correct.
- There are two loops connect to one alarm device.

20. Remote control does not work.

There are following possibilities:

- Remote control address is not correct.
- Distance is too far or control angle is too small.
- Remote control battery power is low.
- Remote control is damaged or DVR front panel is damaged.

21. Record storage period is not enough.

There are following possibilities:

- Camera quality is too low. Lens is dirty. Camera is installed against the light. Camera aperture setup is not correct.
- HDD capacity is not enough.
- HDD is damaged.

22. Can not playback the downloaded file.

There are following possibilities:

- There is no media player.
- No DXB8.1 or higher graphic acceleration software.
- There is no DivX503Bundle.exe control when you play the file transformed to AVI via media player.
- No DivX503Bundle.exe or ffdshow-2004 1012 .exe in Windows XP OS.

23. Forget local menu operation password or network password

Please contact your local service engineer or our sales person for help. We can guide you to solve this problem.

Slight difference may be found in user interface.

All the designs and software here are subject to change without prior written notice.

Please visit our website for more information.

8 Appendix

HDD Capacity Calculation

Calculate total capacity needed by each DVR according to video recording (video recording type and video file storage time).

1. According to formula (1), calculate storage capacity q_i that is the capacity of each channel needed for each hour, unit Mbyte.

$$q_i = d_i \div 8 \times 3600 \div 1024 \quad (1)$$

In the formula: d_i means the bit rate, unit Kbit/s

2. After video time requirement is confirmed, according to Formula (2) to calculate the storage capacity m_i , which is storage of each channel needed unit Mbyte.

$$m_i = q_i \times h_i \times D_i \quad (2)$$

In the formula:

h_i means the recording time for each day (hour).

D_i means the number of days for which the video should be kept.

3. According to formula (3), calculate the total capacity (accumulation) q_T that is needed for all channels in the DVR during **scheduled video recording**.

$$q_T = \sum_{i=1}^c m_i \quad (3)$$

In the formula: c means total number of channels in one DVR

4. According to formula (4), calculate the total capacity (accumulation) q_T that is needed for all channels in DVR during **alarm video recording (including motion detection)**.

$$q_T = \sum_{i=1}^c m_i \times a\% \quad (4)$$

In the formula: $a\%$ means alarm occurrence rate.

Compatible USB Drive List

Note

Please upgrade the DVR firmware to latest version to ensure the accuracy of the table below. If you use the USB drive, please confirm the format FAT or FAT32.

Manufacturer	Model	Capacity
Sandisk	Cruzer Micro	512M
Sandisk	Cruzer Micro	1G
Sandisk	Cruzer Micro	2G
Sandisk	Cruzer Micro	4G
Sandisk	Cruzer Micro	8G
Kingston	DataTraveler	2G
Kingston	DataTraveler	4G
Kingston	DataTraveler	8G

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